KENWOOD

MICRO HI-FI COMPONENT SYSTEM

HM-582MD

INSTRUCTION MANUAL

KENWOOD CORPORATION

Before installation, be sure to read "System configuration" and "Installation" in this manual to ensure correct installation. → 6

B60-4705-00 00 (CH) (T) AP 0001

Before applying power

⚠ ***Caution : Read this page carefully to ensure safe operation.***

Units are designed for operation as follows.

Europe and U.K. ..... AC 230 V only

For the United Kingdom

Factory fitted moulded mains plug

1. The mains plug contains a fuse. For replacement, use only a 13-Amp ASTA-approved (BS1362) fuse.

2. The fuse cover must be refitted when replacing the fuse in the moulded plug.

3. Do not cut off the mains plug from this equipment. If the plug fitted is not suitable for the power points in your home or the cable is too short to reach a power point, then obtain an appropriate safety approved extension lead or adapter, or consult your dealer.
   If nonetheless the mains plug is cut off, remove the fuse and dispose of the plug immediately, to avoid a possible shock hazard by inadvertent connection to the mains supply.

IMPORTANT: The wires in the mains lead are coloured in accordance with the following code:
Blue : Neutral
Brown : Live

Do not connect those leads to the earth terminal of a three-pin plug.

Safety precautions

WARNING : TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.
	THE LIGHTNING FLASH WITH ARROWHEAD SYMBOL, WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE USER TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" WITHIN THE PRODUCT'S ENCLOSURE THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK TO PERSONS.
	THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE APPLIANCE.

The marking of products using lasers

CLASS 1
LASER PRODUCT

The marking is located on the rear panel and says that the component uses laser beams that have been classified as Class 1. It means that the unit is utilizing laser beams that are of a weaker class. There is no danger of hazardous radiation outside the unit.

CAUTION
INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM.

Inside of this laser product, a component (a laser diode: Wavelength: 760-800nm) classified as Class 3A laser radiation is contained as alerted by the internal caution label shown above. To avoid exposure to laser beams, do not open the cover.

Special features

❑ Layout free

The system components can be installed vertically on the sides (lengthwise) as well as the conventional, horizontally stacked installation.
Try various layouts of the main unit and speakers and find that match your listening room.

❑ CD → MD high-speed (2x-speed) dubbing

A convenient feature enabling dubbing from CD to MD with simple operation and short period. (Single CD track dubbing is newly available in addition to the all-track dubbing.)

❑ Frosty door with interior design considerations

The main unit is provided with a storable door, a feature that cannot be found in previous stereo systems. The door does not only protect the system from damage and dirt but also suits the interior of many listening rooms.

❑ Low standby power consumption

The power consumption during standby is no more than 2 W.

❑ LCD (Liquid Crystal Display) with backlit illumination

A high-definition graphic display on each component shows the operating modes such as CD playback and tuner reception conditions at a glance. The display orientation can be changed according to whether the system components are installed vertically or stacked horizontally.

❑ CD-TEXT data display

When discs conforming to CD-TEXT are played with this unit, the text information recorded on the CD (disc name or titles) is displayed automatically. Some CDs conforming to CD-TEXT may not display text information.

❑ R.D.S. (Radio Data System)

The RDS data included in FM broadcasts can be used to search for the intended broadcasting contents and for automatic reception from standby.

❑ Convenient timer functions

❶ **O.T.T. timer :**
When the set time comes, a source starts to play automatically only for an hour.

❷ **Program timer for playback (AI timer playback) and timer recording:**
Two timer programs (PROG.1 and PROG.2) are available for each of the timer playback (AI timer playback) and timer recording functions. (When playback is started with the AI timer, the volume increases automatically until the specified level.)

❸ **Sleep timer :**
When the set time comes, the power of the system is set automatically to OFF (standby). This is convenient for example when you want to fall asleep while listening to music.

❑ Sampling rate converter built in

The unit incorporates a sampling rate converter to handle different kinds of digital sources (32kHz, 44.1kHz, 48kHz).

Contents

Caution : Read the pages marked ⚠ carefully to ensure safe operation.

Preparation section

⚠ Before applying power 2
⚠ Safety precautions 2
Introduction 3
Special features 3
Front door 5
Installation 6
System connection 7
1. Connection of the System Accessories 7
2. Connection of Other Accessories (Commercially Available Parts) 9
Controls and indicators 10
Main unit 10
Remote control unit 12
Operation of remote control unit 13
Display 14
Clock adjustment 15
Menu mode 16
Operation in menu mode 16

Basic section

Hearing sound 18
Playback of CD 20
Playback of MD 23
Searching a desired track by its title (TITLE SEARCH) 25
Receiving broadcast station 26
Using R.D.S. (Radio Data System) 29
Searching for a desired program type (PTY search) 30
Recording on MD 32

Application section

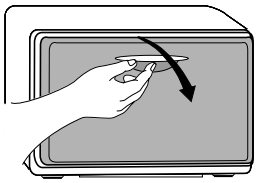
Various CD/MD playback features 38
Listening in the desired sequence (program playback) .. 38
Repeated playback 40
Playing tracks in a random order (random playback) 41
Convenient Recording Methods 42
Selection of the Recording type 42
High-speed recording of all tracks in a CD 43
High-speed recording of a single track in a CD 44
One-touch recording 45
Program recording 46
MD Edit Functions 47
Selecting the editing function type 47
Reordering several tracks at a time (QUICK MOVE) 48
Moving the order of the track being played in a disc (MOVE) 50
Dividing a track during playback (DIVIDE) 52
Combining tracks during playback (COMBINE) 54
Erasing several tracks at a time (QUICK ERASE) 56
Erasing a single track during playback (ERASE) 58
Erasing all tracks on a disc (ALL ERASE) 59
Assigning a title to a disc or track 60
Copying titles in title memos for use as titles of other MDs or tracks(TITLE COPY)(TITLE MEMO) 65
To delete the edited contents (EDIT CANCEL) 68
Listening to an AUX input source 70
Timer operation 71
Setting the O.T.T. timer 71
Program timer playback (AI timer playback) and timer recording 72
Sleep timer 75

Knowledge section

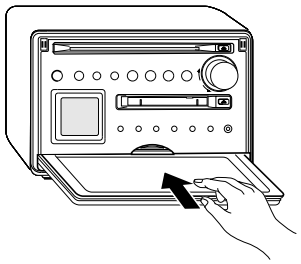
Important Items 76
Maintenance 76
Reference 77
Handling of discs 78
Handling of Mini disc 78
In case of difficulty 79
Specifications 83

Front door

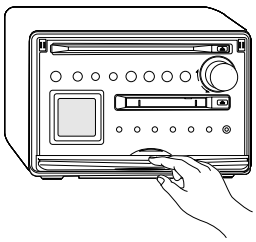
❶ Open the front door.



❷ Store the door by sliding in.



❸ Lock.



- Push in the door until it clicks.
- To close the door, unlock it by pushing it slightly and reverse the above procedure.

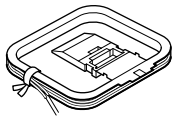
Unpacking

Unpack the unit carefully and make sure that all accessories are put aside so they will not be lost.
Examine the unit for any possibility of shipping damage. If your unit is damaged or fails to operate, notify your dealer immediately. If your unit was shipped to you directly, notify the shipping company without delay. Only the consignee (the person or company receiving the unit) can file a claim against the carrier for shipping damage.
We recommend that you retain the original carton and packing materials for use should you transport or ship the unit in the future.

Keep this manual handy for future reference.

Accessories

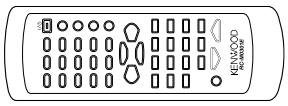
AM loop antenna (1)



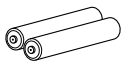
FM indoor antenna (1)

Feet for speaker (8)

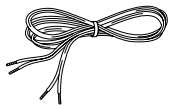
Remote control unit (1)



Batteries (R6/AA) (2)



Speaker cord (2)

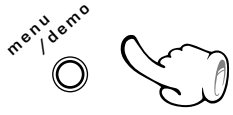


Demonstration

The demonstration consists of sequential switching of display for showing the functions available with the system.
The audio does not change while the demonstration is active.
Demonstration cannot be started during playback (or recording) of a source.

- Provided that the power is set to ON, demonstration is switched automatically to "**DEMO ON**" after there is a power failure or the power cord is unplugged then plugged in again.

DEMO ON (Demonstration executed):
While the power is set to ON , press and hold the menu/demo key on the main unit for more than 2 seconds.



DEMO OFF (Demonstration cancelled):

- Press the **menu/demo** key in the "**DEMO ON**" mode.

Installation

The system features a free layout with which both the main unit and speakers can be installed either on their bottom (horizontally, or widthwise) or on their side (vertically, or lengthwise).

CAUTION

Notes

- When attaching replacement front feet, use only the screws which have been used with the removed feet. (Using other screws may result in a fire or malfunction.)
- Eject the CD, MD and unplug the power cord before installation.

Changing the installation method

Main unit

At the factory, the feet have been attached to the bottom panel for "horizontal" installation.

Vertical installation
Remove the foot from the bottom panel and attach them onto the side panel.

❶ Remove the four feet on the front and rear part of the bottom panel using a screwdriver.

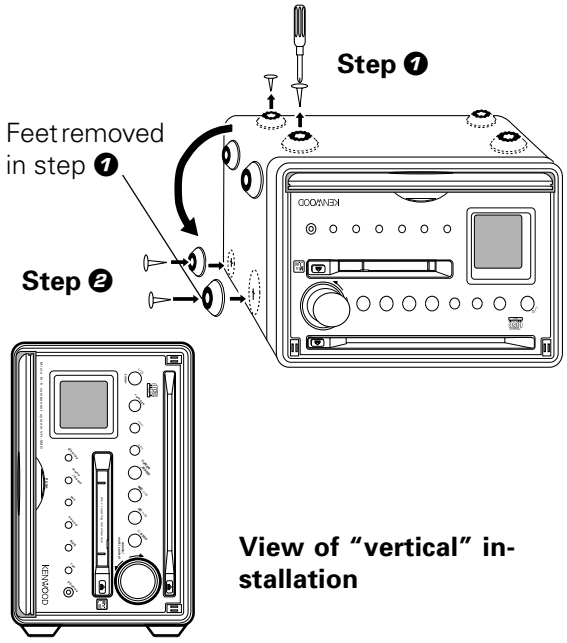
❷ Attach the feet to the specified positions on the side panel.

Use the screws removed in ❶ for attaching.

❸ Place the main unit so that the LCD panel comes at the top as shown in the figure.

CAUTION

Do not install the main unit without feet. Otherwise, the heat produced inside cannot be well ventilated and a fire hazard or malfunction may result.



View of "vertical" installation

Speakers

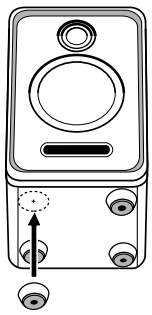
The speakers are shipped without feet attached. Attach the feet by adhesion to the specified positions according to the desired layout.

Attach the four feet with the following procedure.

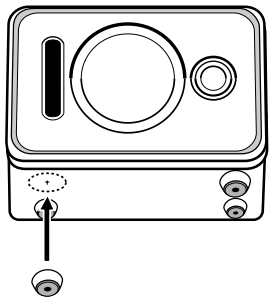
❶ Remove dust and dirt from the positions you want to attach the feet.
❷ Peel off the double-side adhesive tape from each of the provided speaker feet. Attach each feet to the specified position.

- When you want to change the speaker layout, peel off and attach the feet again using commercially-available double-side adhesive tape.

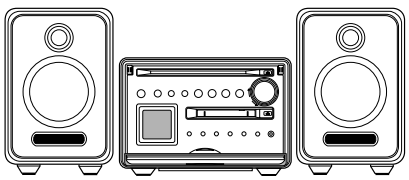
Vertical installation

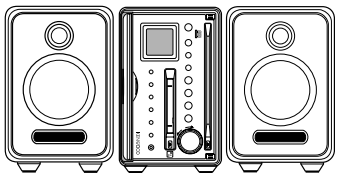


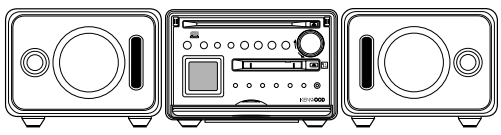
Horizontal installation



Layout examples







CAUTION

Be sure to adhere followings. Or proper ventilation will be blocked causing damage or fire hazard.

- **Do not place any objects impairing heat radiation onto the top of unit.**
- **Leave a space around the unit (from the largest outside dimension including projection) equal or greater than, shown below.**

Top panel : 50 cm Back panel : 10 cm

System connection

1. Connection of the System Accessories

Connect the antenna as shown in the figure.
Do not plug the power cord into a wall AC outlet until the connection has been completed.

Malfunction of microcomputer

If operation is not possible or erroneous display appears even though all connections have been made properly, reset the microcomputer referring to "In case of difficulty". →79

Connection of the Accessory Antenna

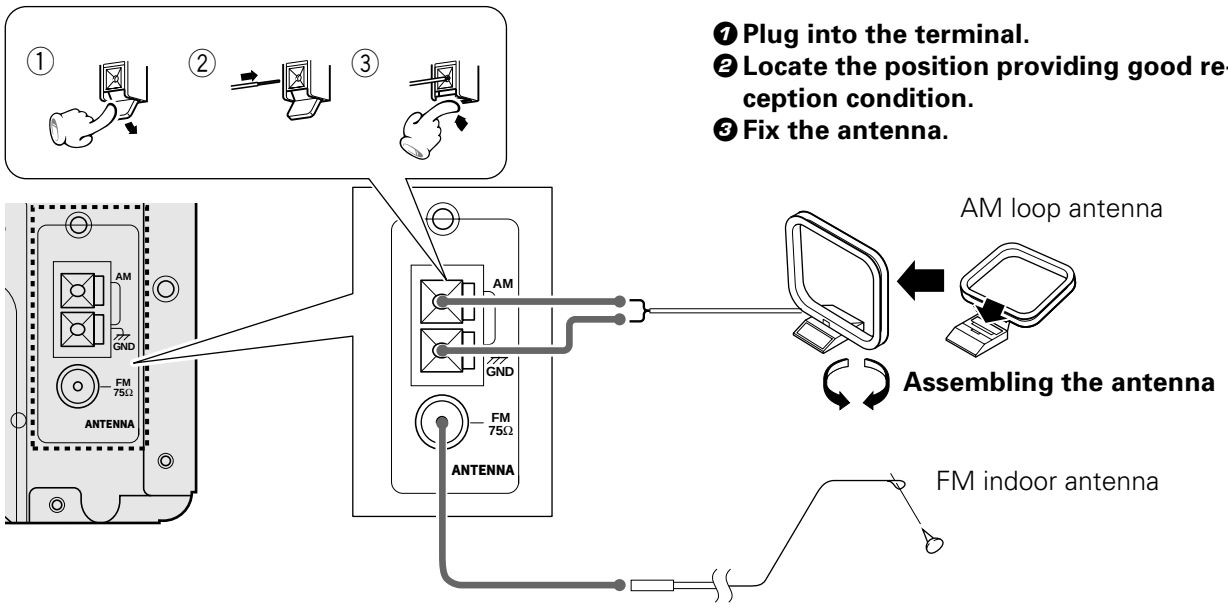
AM loop antenna

The supplied antenna is for indoor use. Place it as far as possible from the main system, TV set, speaker cords and power cord, and set it to a direction which provides the best reception.

FM indoor antenna

The accessory antenna is for temporary indoor use only. For stable signal reception we recommend using an outdoor antenna. Remove the indoor antenna if you connect one outdoors.

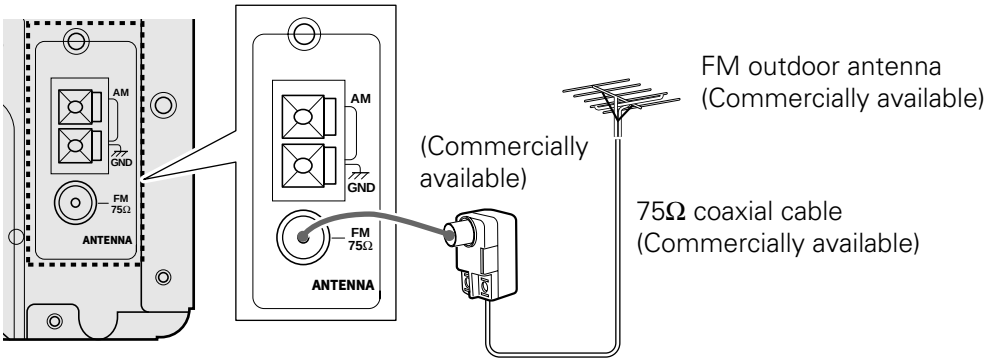
❶ Plug into the terminal.
❷ Locate the position providing good reception condition.
❸ Fix the antenna.



In case of bad reception

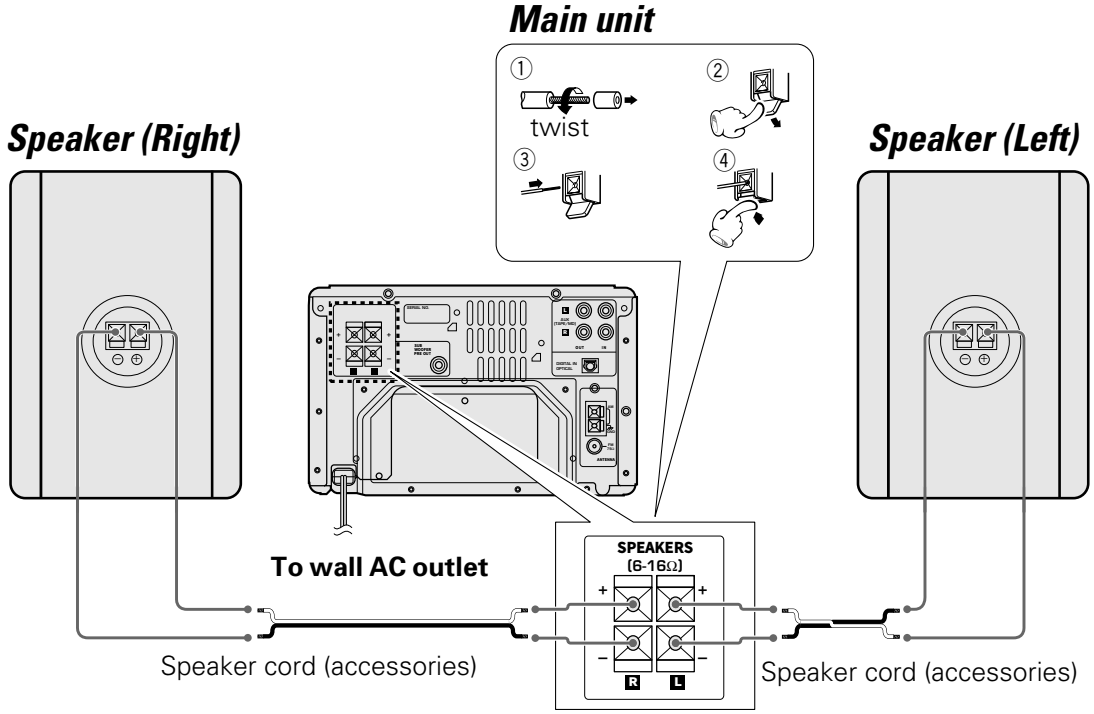
FM outdoor antenna *(Commercially available)*

Lead the 75Ω coaxial cable connected to the FM outdoor antenna into the room and connect it to the FM 75Ω terminal. Please remove the indoor antenna after an outdoor antenna has been installed.

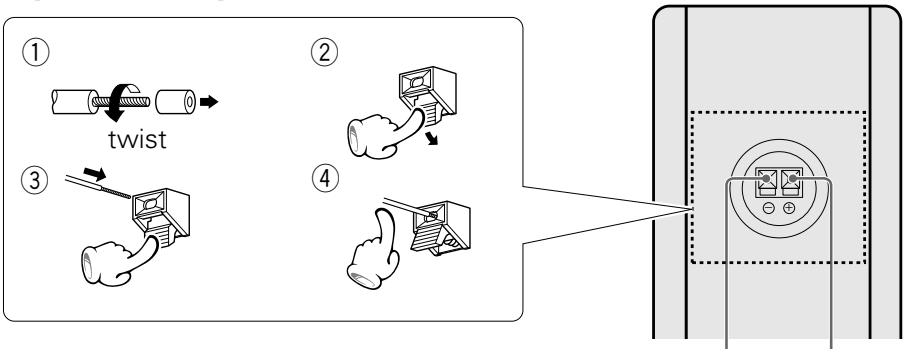


Connection of speakers

- Never short-circuit the + and – speaker cords.
  The protection circuit will operate and no sound will be put out.
- The + and – polarity are inverted, the sound will be unnatural with unclear localization of musical instruments.
- With the speakers of this system, there is no distinction between the left and right speakers.



Speaker rear panel



Notes

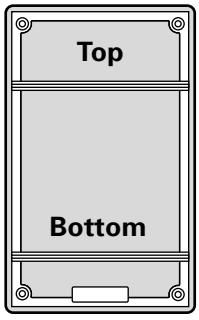
1. Be sure to insert all connection cords securely. If their connections are imperfect, the sound may not be produced or noise may interfere.
2. Before plugging or unplugging a connection cord, be sure to unplug the power cord from the wall AC outlet.
   If connection cords are plugged or unplugged with the power cord left plugged in, malfunction or damage may result.

Attaching the speaker nets

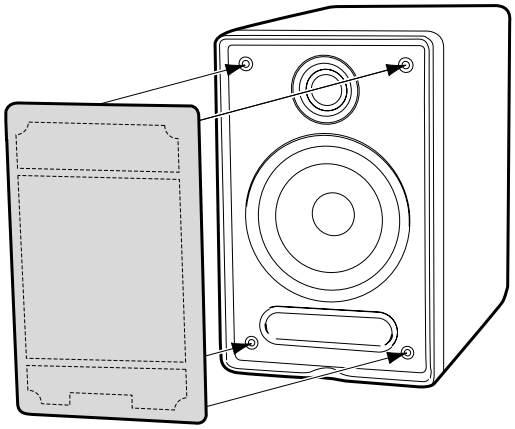
Use the following procedure when you want to attach the speaker net to each speaker.

Align the projections on the back of the speaker net with the holes on the top edge of the speaker, and push in gently to attach the speaker net to the speaker.

Back of the speaker net



- The speaker net has the distinction between the top and bottom. Check its back side to attach it in the correct direction.



2. Connection of Other Accessories *(Commercially Available Parts)*

CAUTION

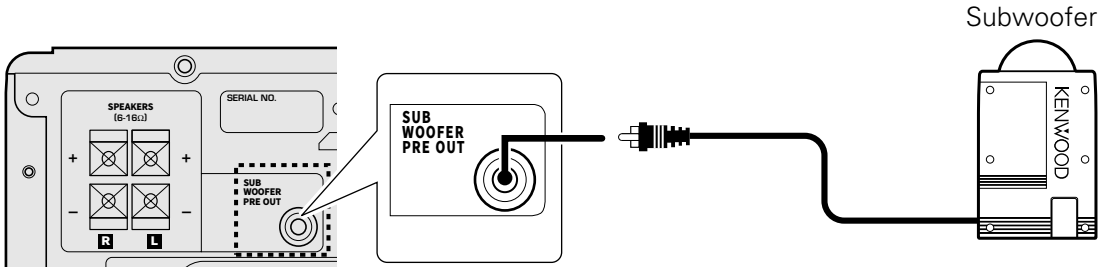
When connections are to be made, make sure that the power plug is not plugged into a wall AC outlet. Connect the equipment as shown in the figures.

Malfunction of microcomputer

If operation is not possible or erroneous display appears even though all connections have been made properly, reset the microcomputer referring to "In case of difficulty". →79

Conection of Subwoofer (optional)

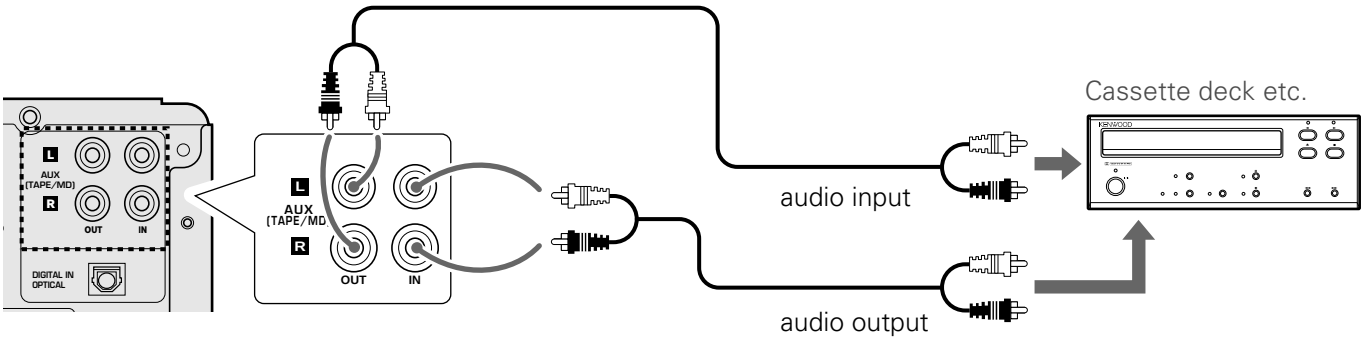
Extremely low frequency sound is played back powerfully.



Connection of external source component

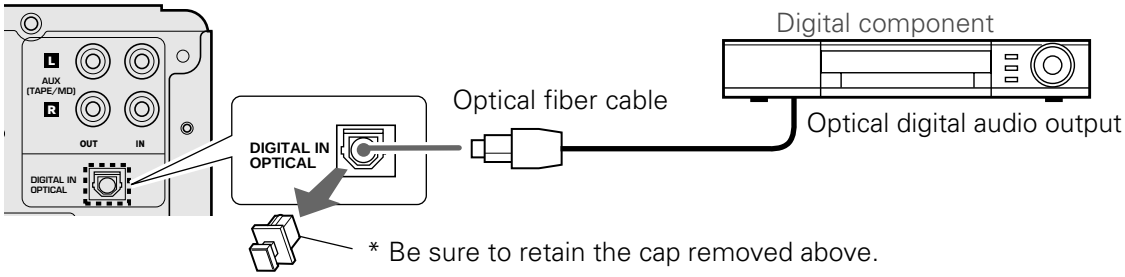
Analog signal connection

The **AUX (TAPE/MD)** input jacks on the rear panel can be used to connect a cassette deck, etc.



Digital signal connection

The **OPTICAL** digital input jack on the rear panel can be used to connect a digital component.

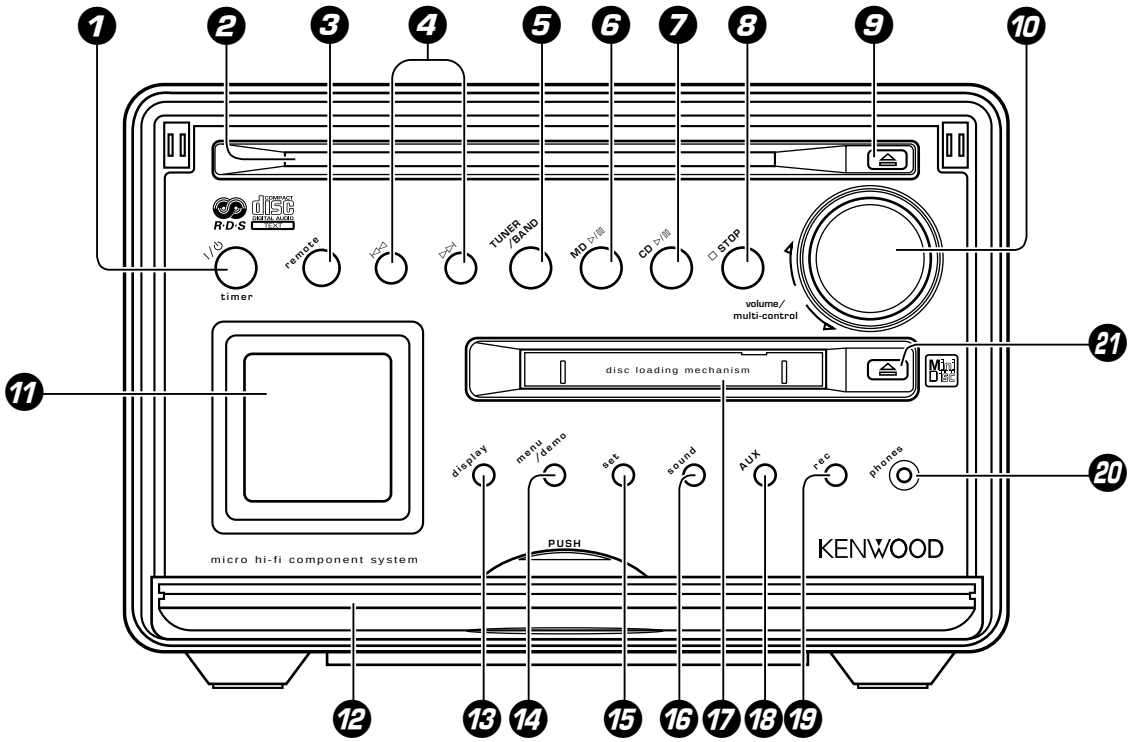


Notes

1. In case an associated system component is connected, also read the instruction manual of the component.
2. Insert the optical-fiber cable straight into the connector until it clicks.
3. Be sure to attach the protection cap when the connector is not used.
4. Never bend or bundle the optical-fiber cable.

Controls and indicators

Main unit



Standby mode

While the standby indicator of the unit is lit, a small amount of current is flowing into the unit's internal circuitry to back up the memory. This condition is referred to as the standby mode of the unit. While the unit is in the standby mode, it can be turned ON from the remote control unit.

❶I / ⏻/timer key (indicator)

Key

Press to switch the power ON and OFF (standby). →18 →71 →74

Indicator

When power is ON :Light in green.
When power is OFF (standby) :Lights in red. →10
During timer standby :Lights in amber. →71 →74

❷CD insertion slot

❸Remote sensor (remote)

❹I◄◄ ►►I keys

During CD/MD playback:
Press to skip CD/MD tracks →21 →24
During tuner reception:
Press to select a radio station. →26

❺TUNER/BAND key

When power is ON:
Press to select the tuner input. →26
When power is OFF (standby)**:**
Press to turn the system power ON and start radio reception on the tuner. →18
During tuner reception:
Press to switch the radio band. →26

❻MD ►/II key

When power is ON:
Press to select the MD input. →23
When power is OFF (standby):
Press to turn the system power ON and start MD playback. →18
When MD input is selected:
Press to start playback or let it pause. →23
Press when playing or recording the input source connected to the **DIGITAL INPUT** jacks. →32 →70

❼CD ►/II key

When power is ON:
Press to select the CD input. →20
When power is OFF (standby):
Press to turn the system power ON and start CD playback. →18
When CD input is selected:
Press to start playback or let it pause. →20

❽ ■ STOP key

When power is OFF (standby) :
Press to display the time of the day for 5 seconds. →15
During CD/MD playback : Press to stop playback. →21 →24
During MD recording : Press to stop recording. →33

❾ ▲ (CD eject) key

This key is pressed to remove CD. The key lights when a CD is loaded inside. →21

❿ volume/multi-control knob

This knob is usually used to adjust the listening volume but can also be used in setting selection, timer reservation and clock adjustment operations. →15 →16 →17 →18

⓫ Character data display

⓬ Front door →5

⓭ display key

Press to switch the graphics in the display. →14

⓮ menu/demo key

Press to switch on/off the setting selection modes and demonstration mode. →5 →15 →16

⓯ set key

When power is ON :
Press to set or enter a menu item. →15 →16

⓰ sound key

Press to adjust the tone. →19

⓱ MD insertion slot

⓲ AUX key

Press when playing or recording the input source connected to the **AUX** (analog) input jacks. →32 →70

⓳ rec key

Press to start recording. →33

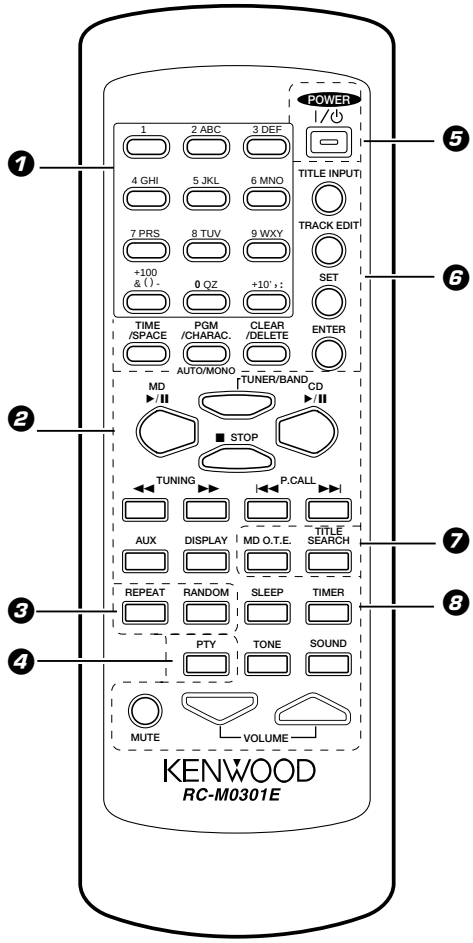
⓴ phones jack

Plug headphones with a stereo mini-plug (optional). →19

㉑ ▲ (MD eject) key

This key is pressed to remove MD. The key lights when a MD is loaded inside. →24

Remote control unit



Infrared ray system
Model : RC-M0301E

❶Character/numeric keys

When CD or MD input is selected:
Press to enter numbers. →21 →24
During tuner reception:
Press when recalling a preset radio station. →26 →28
When MD title input operation
Used to enter alphanumeric and symbol characters. →61

❷Basic operation keys

TUNER/BAND key
Press to select the tuner input. →26
This key is also used to switch the broadcast bands. →26

MD►/II (play/pause) key →18 →23

CD►/II (play/pause) key →18 →20

STOP ■ (stop) key
When power is OFF (standby) :
Press to display the time of the day for 5 seconds. →15
During CD or MD playback : Press to stop playback. →21 →24
During MD recording : Press to stop recording. →33

I◄◄,►►I keys
During CD or MD playback:
Press to skip CD or MD tracks →21 →24
During tuner reception:
Press to select a radio station. →26

◄◄,►► keys
During CD or MD playback:
Press to fast forward or fast reverse the disc. →21 →24
During tuner reception:
Press to select radio stations. →28

AUX key
Press when playing or recording the input source connected to the AUX (analog) input jacks. →32 →70

DISPLAY key
Press to switch the graphics in the display. →14

❸Keys related to CD and MD

REPEAT key
Press for repeat playback of a CD or MD. →40

RANDOM key
Press to play the tracks in a CD or MD in a random order. →41

❹PTY key
Used at the time of program type detection. →30

❺POWER (I / ⏻) key →18 →71 →74

❻Keys related to MD

TITLE INPUT key
This is used in MD title input operation. →60

TRACK EDIT key
This is used in MD editing for reordering tracks, deleting tracks, etc. →48 →50 →52 →54 →56 →58 →59

SET key
When CD or MD input is selected:
Press to set or enter a program. →38 →48

ENTER key
When MD input is selected:
This is used to execute an MD editing operation or to enter an input title. →25 →48 →49 →51 →53 →55 →56 →57 →58 →59 →63 →63
During tuner reception:
Press to enter a manual preset station. →28

TIME/SPACE key
When CD or MD input is selected:
Press to switch the time information displayed during CD or MD playback. →22 →24
Press to enter a space during MD title entry. →61 →62
Press to vary the character scrolling speed. →17
During tuner reception:
Press to change the radio station name display or frequency display. →29

PGM/CHARAC.(AUTO/MONO) key
When CD or MD input is selected:
Press when selecting program playback or an input character group. →38 →61 →62
During tuner reception:
Press to switch the tuning mode of the tuner. →28

CLEAR/DELETE key
This key is used to clear the program. During title input, it is used to delete a character. →39 →61 →62

❼ Keys related to MD

TITLE SEARCH key
This is used in searching an MD title. →25

MD O.T.E. key
Press during CD playback to record the currently playing track onto MD. →44 →45
Press during stop to record a CD from track number 1. →43 →45

❽ Keys related to timer and sound

TIMER key
Press to execute or cancel a timer program. →71

SLEEP key
Press to set the sleep timer. →75

SOUND key
Press to select **S.DIRECT**, **N.B.1**, **N.B.2** or **TONE**. →19

TONE key
Press to adjust the highest and lowest frequencies. →19

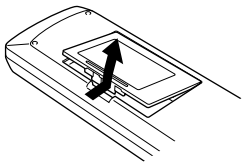
VOLUME key
Press to adjust the listening volume or tone. →18 →19
Press to select the PTY SEARCH. →30

MUTE key
Press to mute sound temporarily. →19

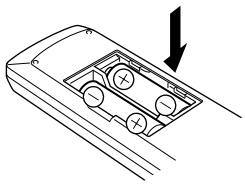
Operation of remote control unit

Loading batteries

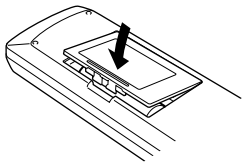
❶ Remove the cover.



❷ Insert batteries.



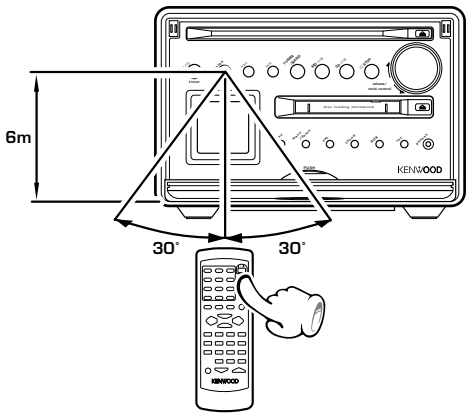
❸ Close the cover.



- Insert two R6 ("AA"-size) batteries following the polarity indications.

Operation

Plug the power cord into a power outlet and press the "I/⏻ POWER" key on the remote control unit to switch the power ON. Then press the key of the function you want to control.

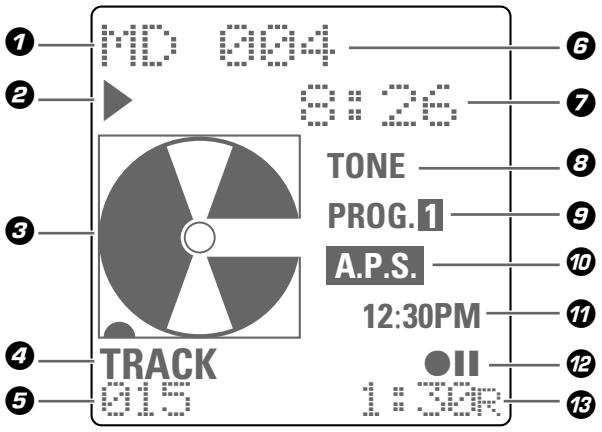


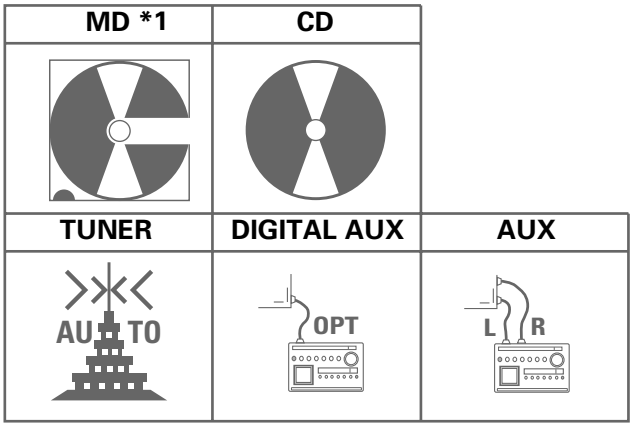
- When pressing more than one remote control keys successively, press the keys securely by leaving an interval of 1 second or more between keys.

Notes

1. The provided batteries are intended for use in operation checking, and their service life may be short.
2. When the remote controllable distance becomes short, replace both of the batteries with new ones.
3. If direct sunlight or the light of a high- frequency fluorescent lamp (inverter type, etc.) is incident to the remote sensor, malfunction may occur. In such a case, change the installation position to avoid malfunction.

Display



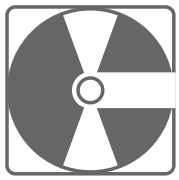


❶ Selector display (MD,CD,AM, FM, AUX)
❷ Play(►)/Pause(II) indicator
❸ Graphic display
❹ Playback/tuning indicators (TRACK, PROGRAM, RANDOM, STEREO)
❺ Total tracks of entire MD
❻ Track No.being played
❼ Character information display (play time, title display, etc.)
❽ Tone related indicators (S.DIRECT, N.B.1, N.B.2, TONE)
❾ TIMER-related display (O.T.T., PROG.1, PROG.2)
❿ Auto Power Save display
⓫ Time display
⓬ MD rec(●)/Pause(II) indicator
⓭ Remaining MD recordable time display

*1 Display when an MD is loaded

Recordable MD

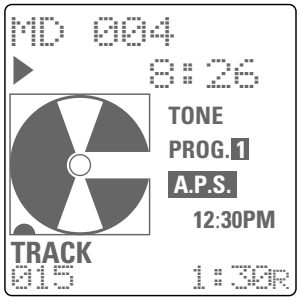
Recording-protected MD


Playback-only MD

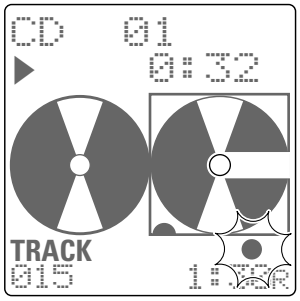
In regard to DISPLAY key

Each press of the DISPLAY key switches the graphic display. (Example of display)

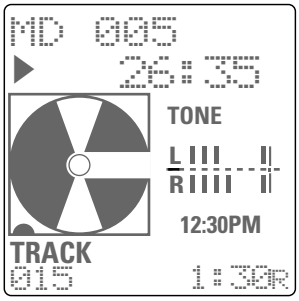
Normal display



Graphic display



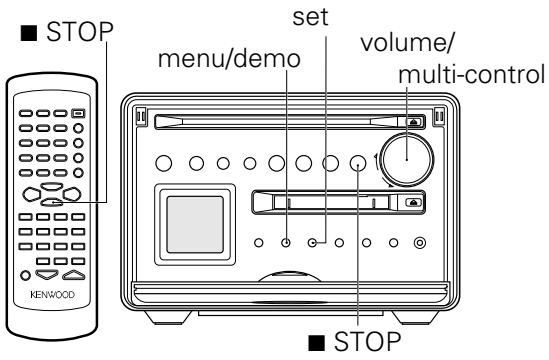
Level meter display



Clock adjustment

This unit incorporates a clock function. Be sure to adjust the correct time before using the timer function.

If there is a power failure or the power cord is unplugged then plugged in again while the power set to off (STANDBY mode) after a timer is activated, the I / ⏻/timer indicator blinks in amber.
In this case, adjust the clock again.



Switching the power ON

1 *Activate the clock adjustment mode.*

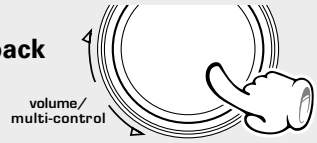
❶ Press the menu/demo key.

❷ Rotate the volume/multi-control knob to select "TIME ADJUST ?", then press the set key.

❸ Select "12 HOUR" or "24 HOUR" by rotating the volume/multi-control knob, then press the set key.

2 *Enter the hour.*

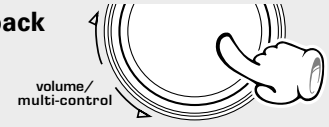
❶ Adjust the figure of hour by rotating the volume/multi-control knob.

To put back the time  **To advance the time**

❷ Press the set key.

3 *Enter the minute.*

❶ Adjust the figure of minute by rotating the volume/multi-control knob.

To put back the time  **To advance the time**

❷ Press the set key.

When power is OFF (standby) :

Press the ■ STOP key to display the time of the day for 5 seconds.

❷ Select "TIME ADJUST ?"

Blinks

❸ Select the time display mode.

Blinks

- The time of the day is represented in 12-hour or 24-hour method.

---

❶ Setting the hour

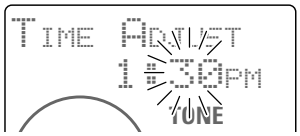
Example for adjusting at 1:30PM

Blinks

- The time display starts to blink.
- Press the **set** key. The hour is entered and the minute display starts to blink.

---

❶ Setting the minute



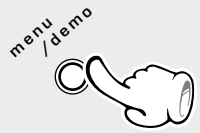
Blinks

- If you pressed the **set** key by mistake, press the **menu/demo** key and restart from the beginning.
- To adjust correct time, press the **set** key at the same moment as a time announcement.

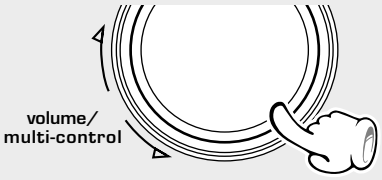
Menu mode

Operation in menu mode

❶ Press the menu/demo key.



❷ Select the item to be set.



❸ Press the set key.

Set other items by repeating ❷ and ❸ for each.

Each turn changes the displayed item.

- **"CD→MD O.T.E. ?" ....** → 43 → 44 → 45 → 46
- **"REC TNO MARK ?" .....** → 34
- **"REC INPUT ?" .....** → 34
- **"AUX D. LEVEL ?" .....** → 35 → 70
- **"AUX A. LEVEL ?" .....** → 35 → 70
- **"MONITOR ?" .....** → 34
- **"TIMER SET ?" .....** → 71 → 72
- **"AUTOPOWERSAVE ?" .....** → 16
- **"TIME ADJUST ?" .....** → 15
- **"AUTO MEMORY ?" .....** → 27
- **"CONTRAST ?" .....** → 17
- **"BACK LIGHT ?" .....** → 17
- **"BALANCE ?" .....** → 19

- The setting mode is canceled if no key or dial has been operated for more than 20 seconds during the above.

Display in menu mode

- Some items cannot be selected depending on the current mode. "⃠" blinks in this case. The cause can be displayed by pressing the **set** key.

Blinks

"AUX A. LEVEL" is not available unless the input selector is set to **"AUX"**. Select the **"AUX"** input.

- The current setting is indicated by "►" and an option item is indicated by ">".

Current setting

Option item

Auto Power Save (A.P.S.)

When the power has been left ON for more than 30 minutes while the unit has been doing neither recording or playback in this period, the A.P.S. function switches the power OFF (standby) automatically. Whether the A.P.S. function is to be used or not can be set with the following steps.

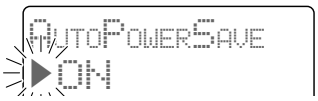
❶ Press the menu/demo key.

❷ Rotate the volume/multi-control knob to select "AUTOPOWERSAVE ?", then press the set key.

❸ Select "ON" or "OFF" by rotating the volume/multi-control knob, then press the set key.

- With the **TUNER** and **AUX** input, A.P.S. functions only when the volume is set to zero.
- The LCD shows **"A.P.S."** while this function is active.

Blinks



Lights

LCD contrast adjustment (CONTRAST)

The contrast of the LCD display on the main unit can be switched as desired.

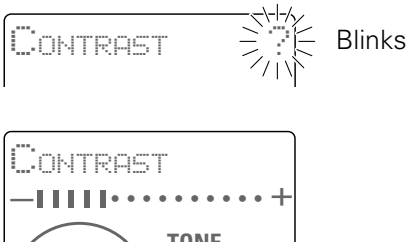
- Adjust the contrast when the LCD display is hard to read due to a problem in the installation position or to the ambient temperature condition, etc.

❶ Press the menu/demo key.

❷ Rotate the volume/multi-control knob to select "CONTRAST ?", then press the set key.

❸ Select the desired brightness (display density) by rotating the volume/multi-control knob, then press the set key.

If the LCD display is hard to view (due to too high or low contrast), press and hold the display key on the main unit for more than 2 seconds. This resets the contrast to the initial value.



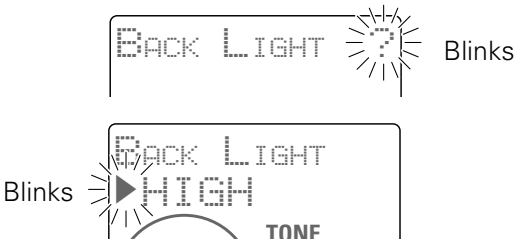
LCD back light adjustment (BACK LIGHT)

The brightness of the back light of the LCD panel can be switched as desired.

❶ Press the menu/demo key.

❷ Rotate the volume/multi-control knob to select "BACK LIGHT ?", then press the set key.

❸ Select "LOW" or "HIGH" by rotating the volume/multi-control knob, then press the set key.



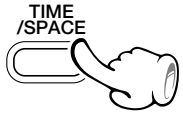
LCD scroll speed adjustment

When CD text or MD title characters scrolled on the LCD panel are hard to read, the scrolling speed can be switched as desired.

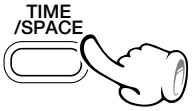
- Adjust the contrast when the LCD display is hard to read due to a problem in the installation position or to the ambient temperature condition, etc.

Select the "CD" or "MD" input. →20 →23

❶ Press the TIME/SPACE key repeatedly to enter title display mode.



❷ Press and hold the TIME/SPACE key for more than 2 seconds.



❸ Repeat step ❷ until the desired scroll speed is selected.

Pressing and holding the **TIME/SPACE** key for more than 5 seconds resets the scroll speed to the initial value.

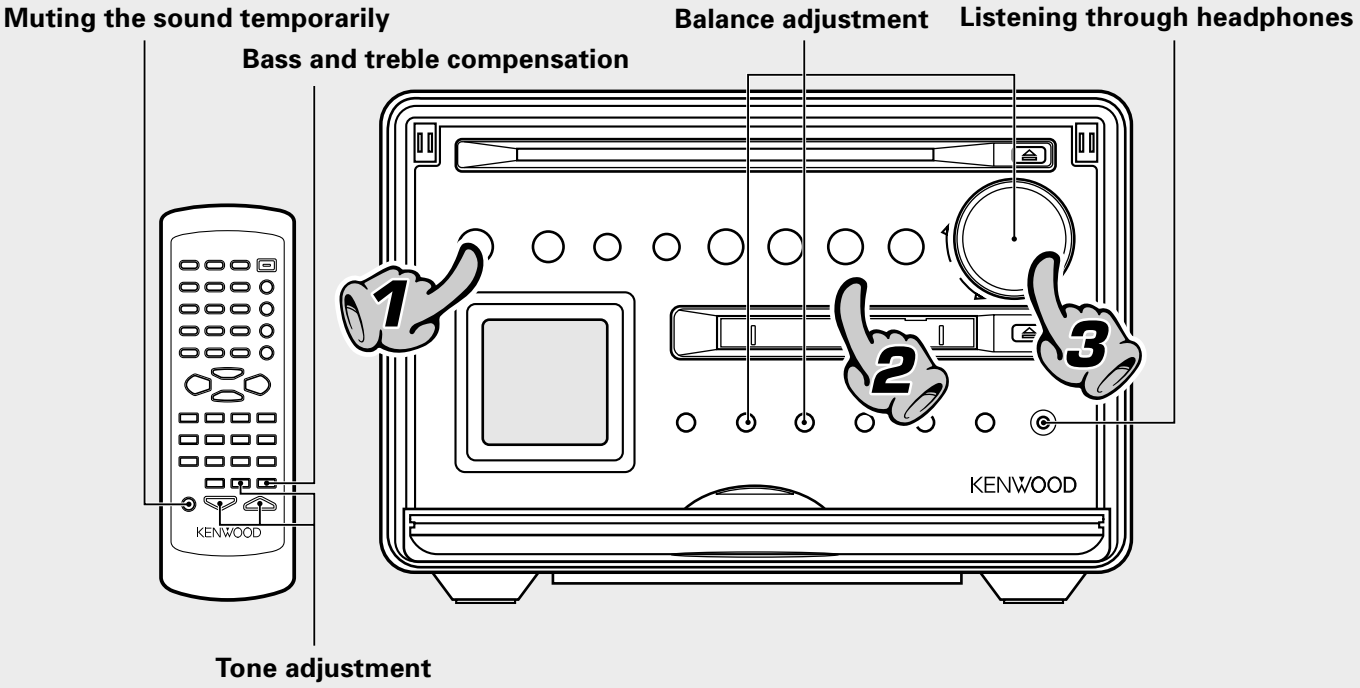
Title display mode

Title is scrolled.

The scroll speed is switched every time the operation is repeated.

→	**"SCROLL FAST +"**	**High speed (Initial value)**
	"SCROLL MIDDLE"	**Middle speed**
	"SCROLL SLOW"	**Slow speed**

Hearing sound



Press the I / ⏻/timer key.

1. Switching the power ON (OFF).

When the I / ⏻/timer key is pressed while the power is ON, the power will be switched OFF.

- To protect the internal circuitry, the sound is muted for about 5 seconds after the power is switched ON.
- Pressing the **CD ►/II**, **MD ►/II**, **AUX** or **TUNER/BAND** key also turns power on and starts playback (reception) of the corresponding input. (One-touch operation)

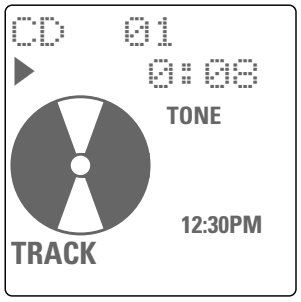
When CD has been selected.

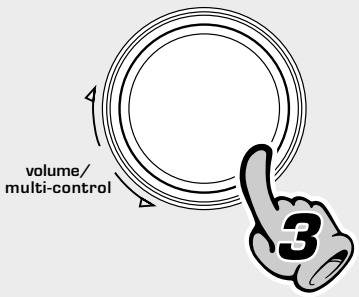
2. Selecting the desired output.

TUNER (radio broadcasting)	→ 26
CD	→ 20
MD	→ 23
AUX	→ 70

- When **CD ►/II** or **MD ►/II** is selected, playback will start when a disc already has been inserted.

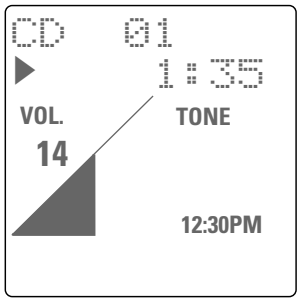
When CD has been selected.





3. Volume adjustment.

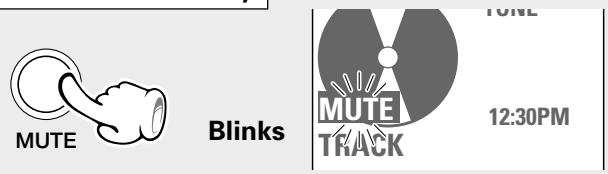
Volume display



- The same function is also available using the **VOLUME** keys on the remote control unit.
- The display shows a reference value (**0~40**).

Muting the sound temporarily (MUTE)

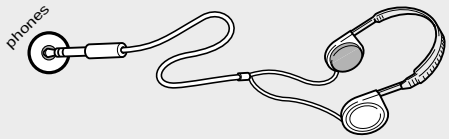
Remote control unit only



- Press again to resume the original volume.
- This is also cancelled when the volume is adjusted.

Listening through headphones

❶ Insert the headphone plug into the phones jack.



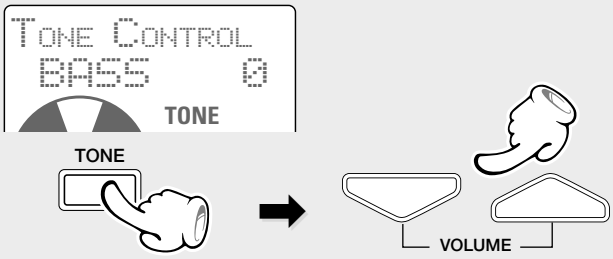
- Headphones with a stereo mini plug can be connected.
- The sounds from all speakers are cut off.

❷ Adjust the volume with the volume/multi-control knob.

Tone adjustment (Remote control unit only)

The responses of the lowest frequencies (BASS) and highest frequencies (TREBLE) can be adjusted as desired.
After this adjustment, the N.B. effect will be disabled.

❶ Press the TONE key to select "BASS". Adjust the level of lowest frequencies as desired using the VOLUME keys.

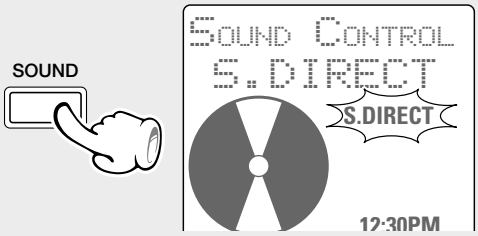


❷ Press the TONE key again while "BASS" is displayed to select "TREBLE". Adjust the level of the highest frequencies using the VOLUME keys.

❸ Press the TONE key once more.

- The **BASS** and **TREBLE** can be adjusted independently in the range from –4 to +4.

Bass and treble compensation (N.B.: Natural Bass circuit)



Each press switch the modes as follows.

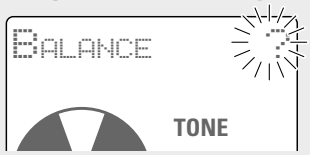
"S.DIRECT" ... The source signal from a CD or MD can be reproduced with high fidelity to the original sound by bypassing the tone control circuitry in the main unit.
"TONE" ..... The source signal is processed by the tone control circuitry before being output from the main unit.
"N.B.1" ..... Only the lowest frequencies are enhanced.
"N.B.2" ..... The lowest and highest frequencies are enhanced according to the current volume level.

Balance adjustment

The balance of volumes from the left and right speakers can be adjusted as follows.

❶ Press the menu/demo key.

❷ Rotate the volume/multi-control knob to select "BALANCE ?", then press the set key.

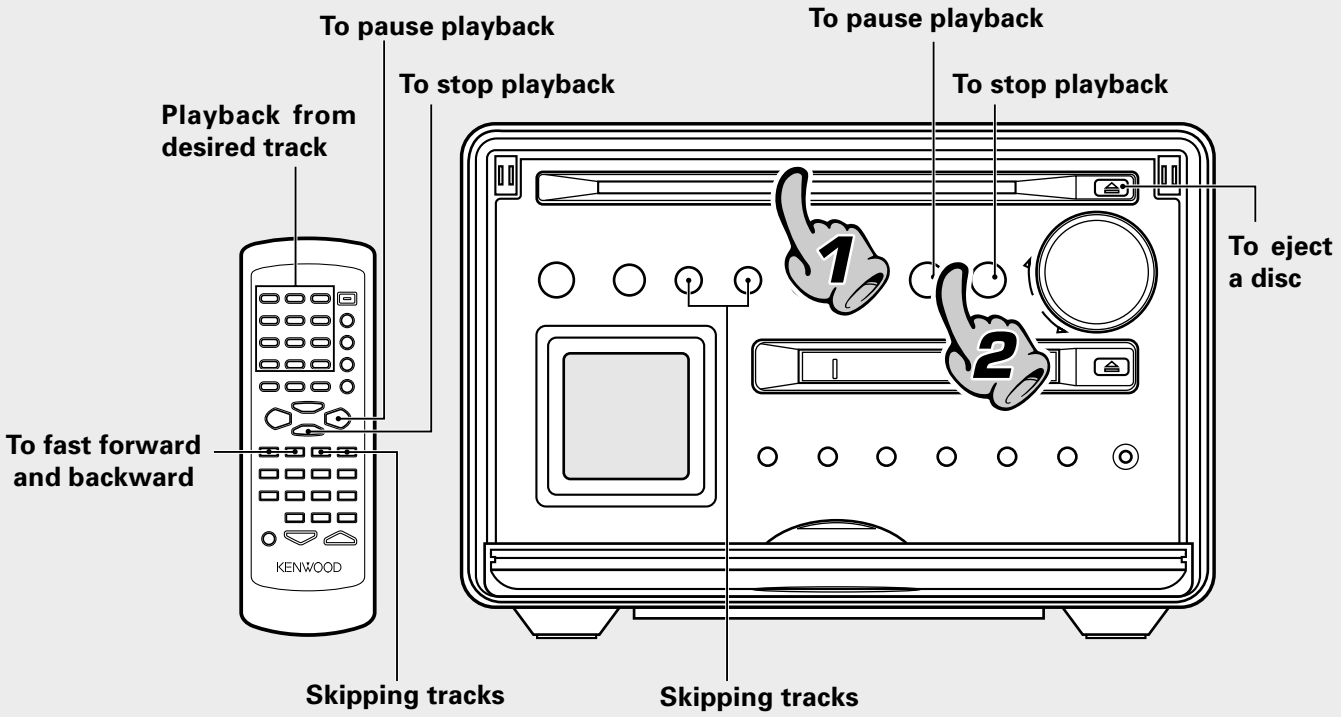


❸ Adjust the left and right speaker balance by rotating the volume/multi-control knob.

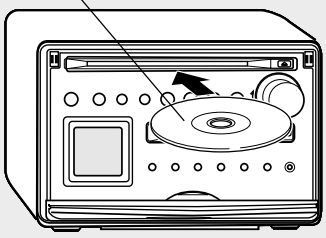
❹ Press the set key.

- This adjustment is not available when "**S.DIRECT**" is selected.

Playback of CD



The label must be on top.



Do not touch the played surface.

Insert a disc in the insertion slot; it will be pulled in automatically into the deep of the unit.

1. Load/eject a disc.

Press the ▲ key to eject the disc.
When taking the disc out of the unit, be sure to pull the disc straight out. If the CD is pulled out in an oblique direction, the played surface may be damaged.

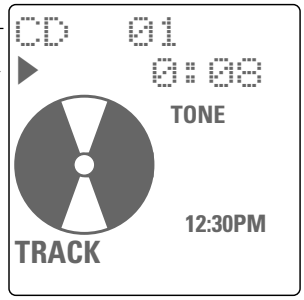
- No adapter is necessary to play an 8 cm CD.
- Discs with certain special designs (transparent discs, etc.) may not be able to be ejected by the first press. In such a case, try holding the ▲ key depressed.
- If a disc cannot be inserted smoothly, try pushing it with a light force; this may promote the automatic insertion of the disc.

The CD cannot be loaded or ejected while the unit is in standby mode. Do not force load a CD in standby mode, otherwise malfunction will result.

2. Start playback. (The "CD" input is selected automatically.)

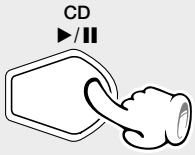
Track No. being played (Upper line)

Elapsed track playing time (Lower line)



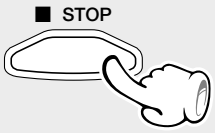
- After a few seconds, play starts from track No.1.

To pause playback



- Each press pauses and plays the CD alternately.
- The graphic display blinks.

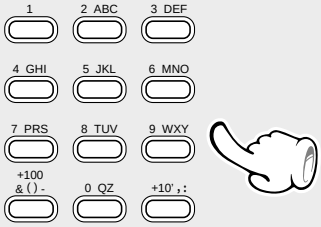
To stop playback



Playback from desired track

Remote control unit only

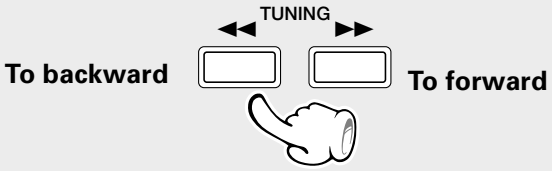
Select the desired track No.



Press the numeric keys as shown below....
To select track No. 12 .. +10, 2
To select track No. 20 .. +10, +10, 0

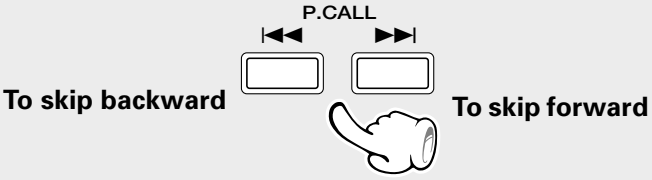
To fast forward and backward

Remote control unit only



- Playback starts from the position where the key is released.

Skipping tracks



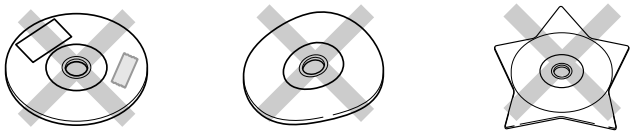
- The track in the direction of the button pressed is skipped, and the selected track will be played from the beginning.
- When the I◄◄ key is pressed once during playback, the track being played will be played from the beginning.
- To skip further to the previous track, press the I◄◄ key quickly.
- Tracks can be skipped by pressing the I◄◄ or ►►I key even in stop mode. In this case, playback starts automatically after skipping.

To eject a disc

If the disc is stopped in the middle of loading or ejection, message "PLEASE PUSH EJECT KEY or PLAY KEY" is displayed and the ≜ key blinks. In this case, press the ≜ key to eject the disc.

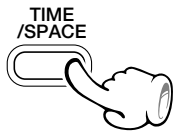
- When the ≜ key is pressed, the disc is pulled inside the unit then ejected. When the **CD ►/II** key is pressed, the disc is pulled in and starts to be played.

Do not attempt to insert a disc with peculiar shape (star shaped, heart shaped, etc.), crack or important warp or a stabilizer marketed for disc protection. Otherwise malfunction may result.



Time display on CD player (Remote control unit only)

Each press of the TIME/SPACE key switches the displayed information items one after another.



- When the total playing time of the tracks programmed for program playback reaches 256 minutes or more, the display shows "**---:--T**" and the time display becomes unavailable.
- When a non-CD-TEXT disc is played, the CD text information display shows "**.....**"

Elapsed time of track being played .....

Remaining time of track being played .....

Elapsed time of entire disc .....

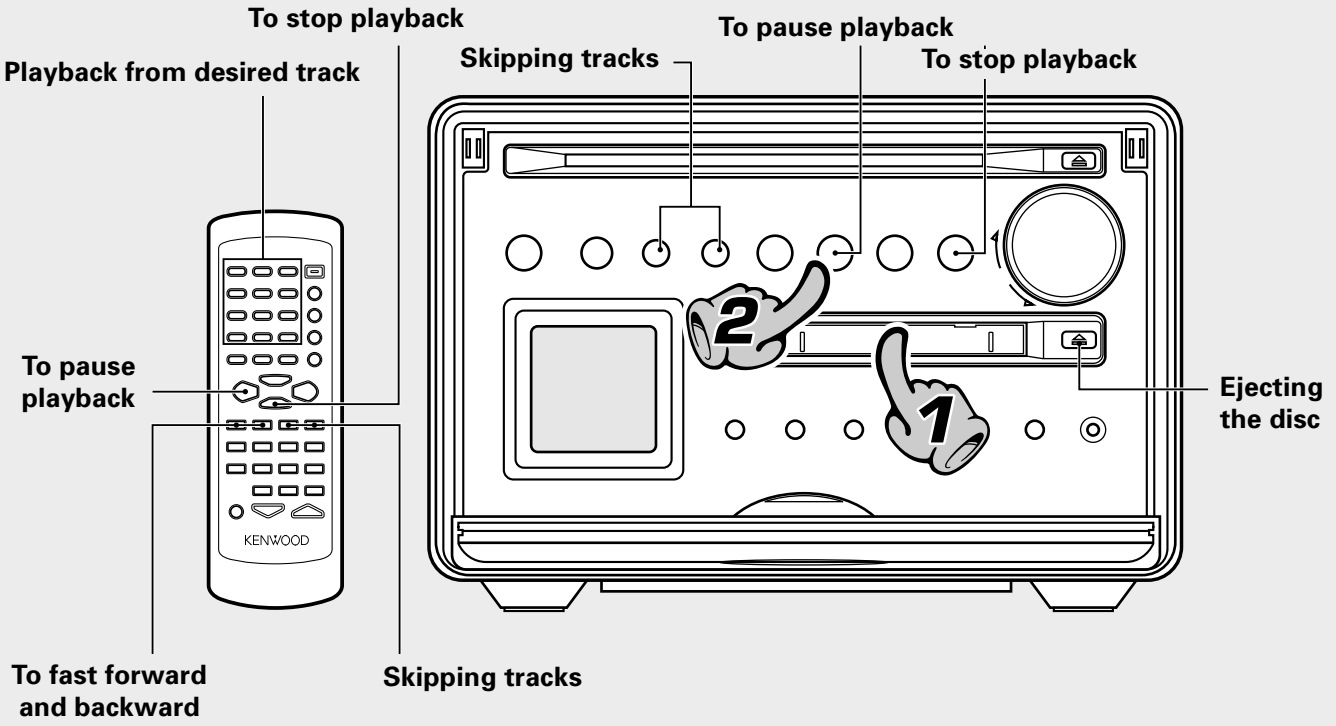
Remaining time on entire disc .....

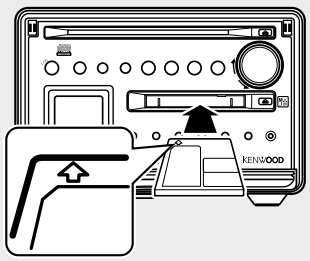
CD TEXT data display (Compatible disc only) .....

CD TEXT function

When discs conforming to CD-TEXT are played with this unit, the text information recorded on the CD (disc name or titles) is displayed automatically. Some CDs conforming to CD-TEXT may not display text information.

Playback of MD

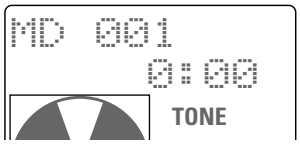




In the direction of the arrow

1. *Load a Mini Disc*

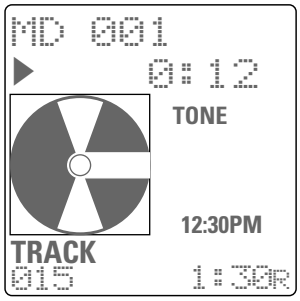
- Insert the minidisc correctly into the slot of this unit.
- The disc indicator (⏏) lights up when an MD is inserted.
- "**READING**" is displayed while the contents of the MD are checked.
- If a title has been assigned to the disc, that title will be displayed.



The MD cannot be loaded or ejected while the unit is in standby mode. Do not force load a MD in standby mode, otherwise malfunction will result.

2. *Start playback.* (The "MD" input is selected automatically.)

Track No. being played



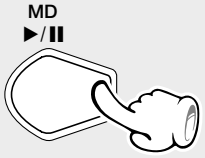
Elapsed time of track being played

Remaining recording time of disc

- After a few seconds, play starts from track No.1.

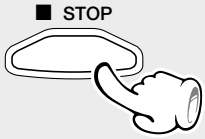
Continued on next page

To pause playback



- Each press pauses and plays the MD alternately.
- The graphic display blinks.

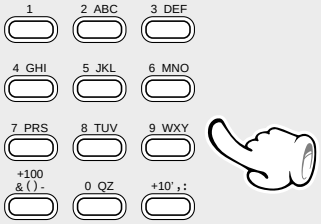
To stop playback



Playback from desired track

Remote control unit only

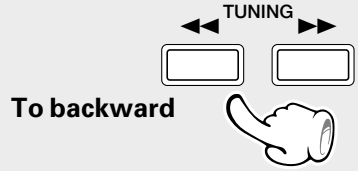
Select the desired track No.



Press the numeric keys as shown below....
To select track No. 12 ... +10, 2
To select track No. 20 ... +10, +10, 0

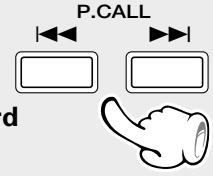
To fast forward and backward

Remote control unit only



- Playback starts from the position where the key is released.

Skipping tracks



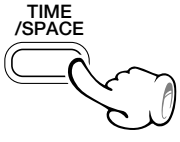
- The track in the direction of the button pressed is skipped, and the selected track will be played from the beginning.
- When the I◄◄ key is pressed once during playback, the track being played will be played from the beginning.
- To skip further to the previous track, press the I◄◄ key quickly.
- Tracks can be skipped by pressing the I◄◄ or ►►I key even in stop mode. In this case, playback starts automatically after skipping.

Ejecting the disc

- Do not leave a Mini Disc half ejected on the insertion slot.

Time display on MD recorder (Remote control unit only)

Each press of the TIME/SPACE key switches the displayed information items one after another.



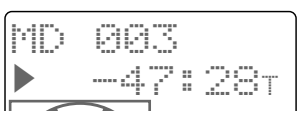
- When the total playing time of the tracks programmed for program playback reaches 256 minutes or more, the display shows "**---:--T**" and the time display becomes unavailable.
- When a track without title is played, the track number and "**.....**" are displayed.

Elapsed time of track being played .....

Remaining time of track being played .....

Elapsed time of entire disc .....

Remaining time on entire disc .....



MD title display .....

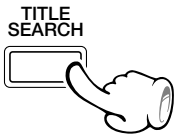
Searching a desired track by its title
(TITLE SEARCH)

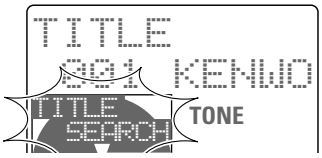
When the titles of the tracks recorded on a minidisc for recording are entered in advance, search by title is possible for the tracks to be played.

Before using the editing function, press the PGM/ CHARAC. key so that "TRACK" lights.

Select the "MD" input. →23

1 *Press the TITLE SEARCH key.*

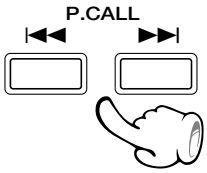




Characters flow toward the left.

- With a track to which no title has been assigned, the track number and "• • • • • • • •" are displayed.

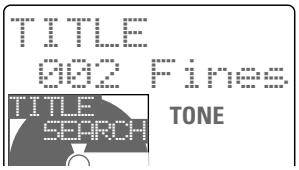
2 *Select the desired ttitle.*



To smaller track No.

To larger track No.

Track played

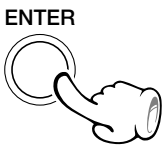


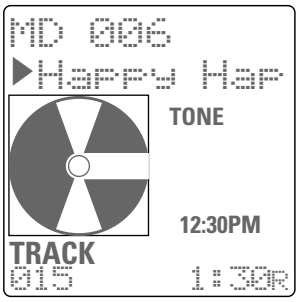
Characters flow toward the left.

- The track can also be selected using the numeric keys.

To abort operation, press the TITLE SEARCH key again

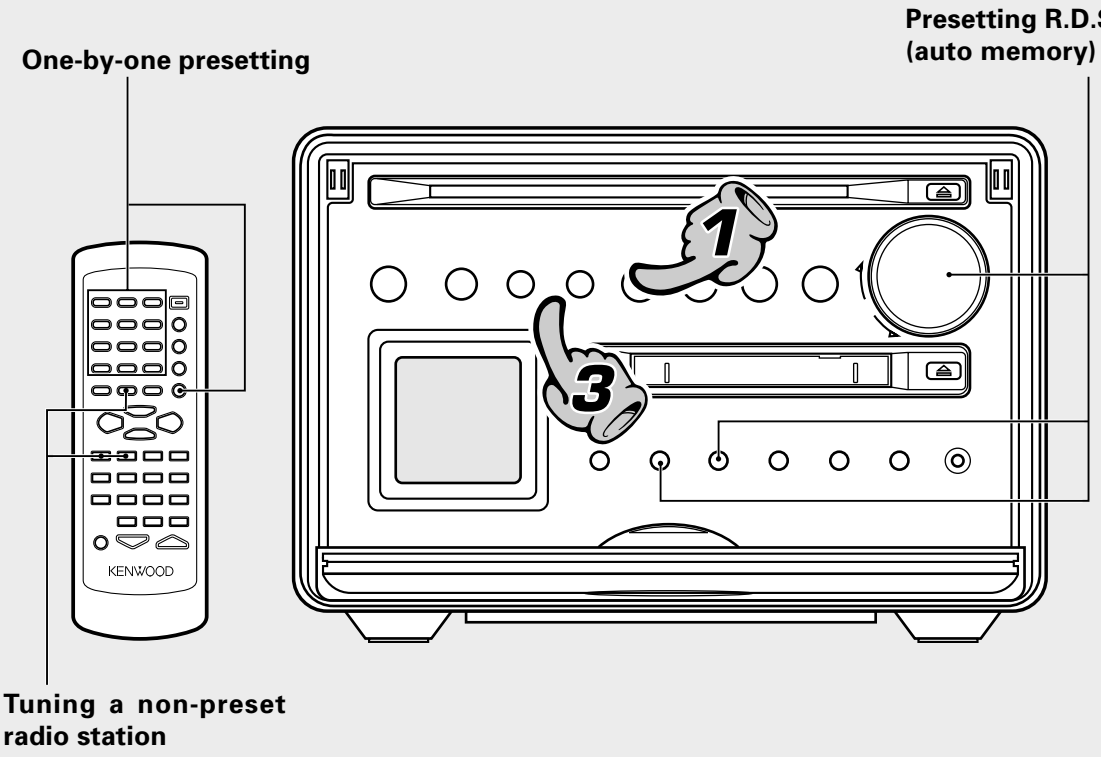
3 *Start playback.*





Characters flow toward the left.

Receiving broadcast station



1. Select the tuner input.

Each press of the TUNER/BAND key switches the band as follows.

FM
AM

2. Preset a radio station in memory .

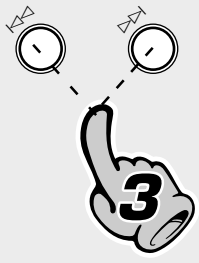
Presetting R.D.S.stations (auto memory)

Follow the procedure in "**Presetting R.D.S.stations (auto memory)**" to preset automatically the tunable radio stations in your area. →27

- Once stations are stored by auto memory, the present procedure is not required from the next time, unless you move of house or re-execute presetting of all tunable stations.

One-by-one presetting (manual preset) →28

A station can also be tuned even when it is not preset. For details, read **"Tuning a non-preset radio station (Auto tuning, Manual tuning)"** →28



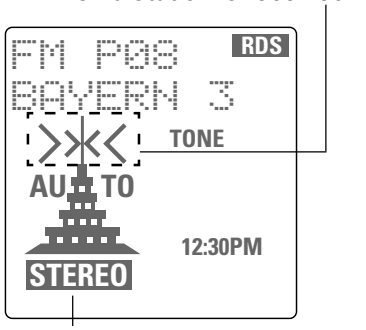
3. Tuning (Preset Call)

If radio stations have already been stored with auto presetting or manual presetting, select a station using the I◄◄,►►I key. Each press of the same key switches the preset stations in sequence.

Press ►►I for the order of
1→2→3 ... 38→39→40→1...
Press I◄◄ for the order of
40→39→38 ... 3→2→1→40...

- To select a preset station from the remote, use the I◄◄, ►►I key or numeric keys.

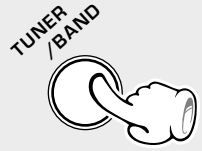
Tuning indicator lights up when a station is received.



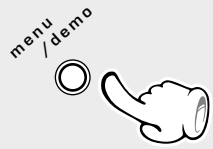
Lights during stereo reception

Presetting R.D.S.stations (auto memory)

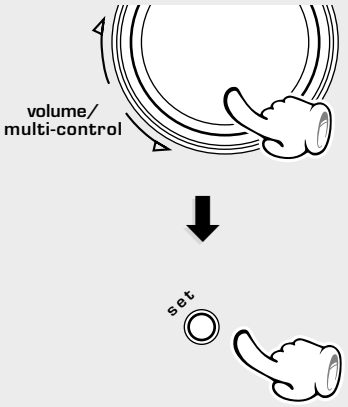
❶ Press the TUNER/BAND key to select the TUNER input.



❷ Press the menu/demo key.



❸ Rotate the volume/multi-control knob to select "AUTO MEMORY ?", then press the set key.



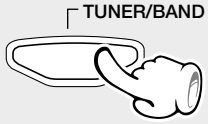
Up to 40 stations can be memorized.

Blinks

- The station name is not displayed if the tuned frequency does not have the station name setting or when the Tuning indicator (>><<) is not lit.
- When auto preset completes, the first station preset by it will be displayed.
- The previously preset frequencies are overwritten.
- For use of the RDS function, stations must be memorized by RDS auto presetting.
- RDS stations are given priority during auto presetting. If there is memory left after presetting, the receiver continues presetting regular FM stations.
- For memorizing of stations other than RDS stations (FM, AM), memorize the stations according to chapter "**One-by-one presetting (manual preset)**". →28

Tuning a non-preset radio station (Auto tuning, Manual tuning)

❶ **Press the TUNER/BAND key to select "FM" or "AM".**



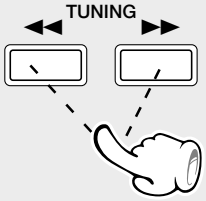
❷ **Press the PGM/CHARAC. key to select auto tuning or manual tuning.**

Normally, use the "AUTO" (Auto tuning) mode.

❸ **Press the ◄◄,►► key to receive a station.**

Auto tuning mode :
Each press receives a new station.
Manual tuning mode :
Press repeatedly until the desired station is received.

To decrease frequency



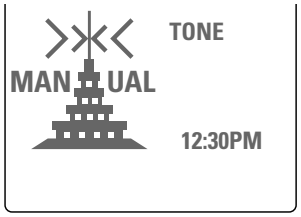
To increase frequency

- Use the manual tuning mode when reception is noisy due to weak reception. (In the manual mode, stereo broadcasts are received in monaural.)

Each press of the key alternates these tuning modes.

"AUTO"

"MANUAL"



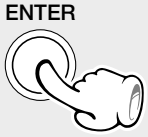
One-by-one presetting (manual preset)

❶ **Perform the procedure in "Tuning a non-preset radio station" to receive the station you want to preset.**

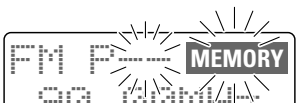
❷ **Press the ENTER key during reception.**

❸ **Select the desired preset number between 1 and 40 using the numeric keys on the remote control unit.**

❹ **Press the ENTER key.**



The preset operation is canceled when no key has been pressed for more than 20 seconds during operation.



Blinks

- Repeat steps ❶~❹ to preset other stations.
- If several stations are preset under the same number, the previous memory is replaced with the latest memory contents.

Lights

Using R.D.S. (Radio Data System)

RDS is a system that transmits useful information (in the form of digital data) for FM broadcasts along with the broadcast signal. Tuners and receivers designed for RDS reception can extract the information from the broadcast signal for use with various functions, such as automatic display of the station name.

For reception of RDS stations, the RDS auto presetting function must be used to preset the stations.
→27

This unit is equipped with the following functions utilizing RDS data:

PS (Program Service Name) Display : (See below.)
When an RDS broadcast is received, the station name is automatically displayed.

PTY (Program Type Identification) Search : →30
The tuner automatically searches for a station which is currently broadcasting a specified program type (genre).

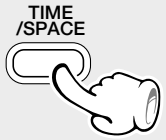
The "**RDS**" indicator lights up when an RDS broadcast (signal) is received.

Some functions may not be provided or be given different names depending on countries or areas.

To switch the display contents

Press the TIME/SPACE key.

Pressing the TIME/SPACE key changes the display contents.



Display mode priority ranking

→ **PS (Program Service Name) Display :**

When an RDS broadcast is received, the station name is automatically displayed.
If no PS data was sent, **"NO PS"** is displayed.

Frequency Display :

The frequency of the current station is displayed.

Searching for a desired program type *(PTY search)*

By specifying the type of program (genre) you want to listen to, the tuner automatically searches for a station which is currently broadcasting a program of the specified type.

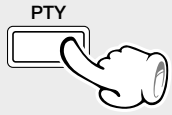
Under certain receiving conditions, it may take more than 1 minute to complete the search.

For reception of RDS stations, the RDS auto presetting function must be used to preset the stations.
→ 27

Set the reception band to FM.

1 *Activate the PTY search mode.*

Press the PTY key.



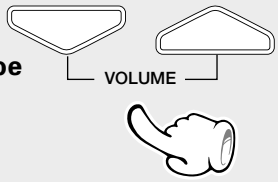
When an RDS broadcast is received, the program type is shown on the display. If no PTY data is available, or if the station is not an RDS station, "NONE" is displayed.

2 *Select the program type you desire.*

Use the program type table on the right for your convenience.

To select using the VOLUME keys

Previous program type



Next program type

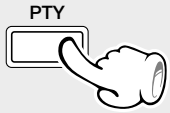
The VOLUME keys let you select from all 29 program types in the order shown at right. Press the key and release it when the desired type is displayed.

Program type table

	Program Type Name	Display
(▽) DOWN ↕ (△) UP	Pop Music	**POP M**
	Rock Music	**ROCK M**
	Easy Listening Music	**EASY M**
	Light Classical	**LIGHT M**
	Serious Classical	**CLASSICS**
	Other Music	**OTHER M**
	News	**NEWS**
	Current Affairs	**AFFAIRS**
	Information	**INFO**
	Sport	**SPORT**
	Education	**EDUCATE**
	Drama	**DRAMA**
	Culture	**CULTURE**
	Science	**SCIENCE**
	Varied	**VARIED**
	Weather	**WEATHER**
	Finance	**FINANCE**
	Children's programs	**CHILDREN**
	Social Affairs	**SOCIAL**
	Religion	**RELIGION**
	Phone In	**PHONE IN**
	Travel	**TRAVEL**
	Leisure	**LEISURE**
	Jazz Music	**JAZZ**
	Country Music	**COUNTRY**
	National Music	**NATION M**
	Oldies Music	**OLDIES**
	Folk Music	**FOLK M**
	Documentary	**DOCUMENT**

3 Start the search.

Press the PTY key.



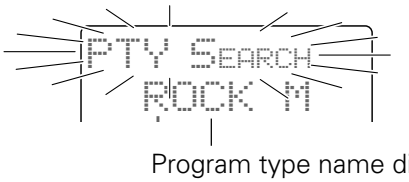
To select another program type

Repeat steps 1, 2 and 3.

- No sound is heard while "**ROCK M**" is blinking.
- If the desired program type cannot be found, "**NO PROGRAM**" is displayed, then after several seconds the display returns to the original display.
- If the desired program type is found, that program is received. The program type display changes temporarily to the frequency display, and then to the station name display.

EXAMPLE: Searching for a Rock Music broadcast.

Display while searching

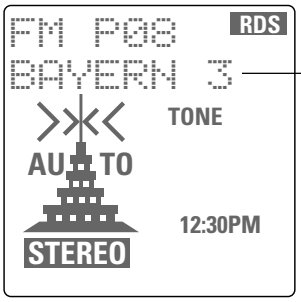


Blinks

Program type name display

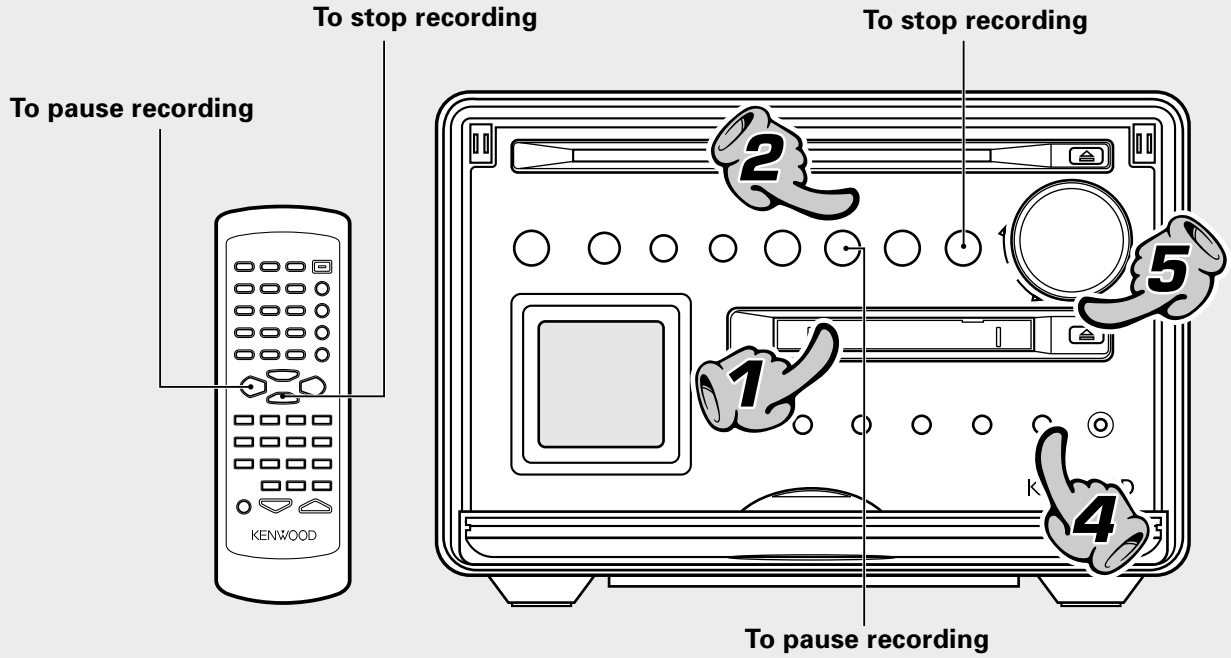
- When the PTY is received, the PTY name blinks and the "**ROCK M**" lights up.

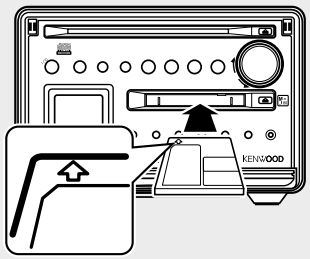
Display when a station is received.



Station name display

Recording on MD





In the direction of the arrow

1. Make the preparations for recording.

❶ **Open the write protect tab of the Mini Disc to make it recordable.**

❷ **Load the Mini Disc.**

The MD cannot be loaded or ejected while the unit is in standby mode. Do not force load a MD in standby mode, otherwise malfunction will result.

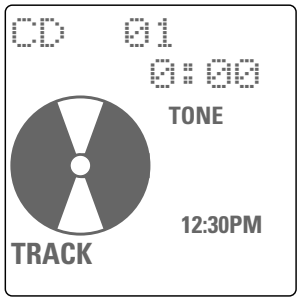
2. Select the source to be recorded.

When CD has been selected.

TUNER (Broadcasts) : Press the TUNER/BAND key
CD : Press the CD ►/II key
AUX
Analog recording : Press the AUX key
AUX
Digital recording : Press the MD ►/II key

- If a CD or MD has already been loaded, it starts to play now. Press the ■ **STOP** key to stop it.
- When **AUX** (digital) is selected, the audio cannot be monitored unless the **MONITOR** mode in the menu is set to "**ON**". → 34

When a CD-TEXT disc is recorded, the text data is not copied onto the MD.



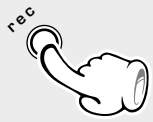
The selected recording source is displayed.

3. Make the preparations for recording.

TUNER (Broadcasts) : Select a station
CD : Enter pause mode at the beginning of the track to be recorded.
AUX
Analog recording : Make preparation for tuning or playback. →70
Digital recording : Set the MONITOR mode of the menu to "ON" then make preparation for tuning or playback.
→34 →70

- The recording format can be selected according to the input source as required. (**REC INPUT**) →34
- The input level of an external input source can be selected as required. (**AUX A. LEVEL/AUX D. LEVEL**) →35
- When recording an MD, the track number assignment can be selected as required. (**REC TNO MARK**) →34

4. Start recording.



❶ Press the rec key. (the unit enters record-pause mode)

❷ When the preparation is complete, press the rec key again.

- When the input source is a CD, the MD recording starts at the same time as the **CD ►/II** key is pressed. (Synchronized recording)

❸ Play (or tune) the music source to be recorded.

5. After recording , eject the MD.

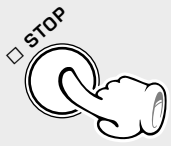
- Be sure to eject the MD after recording. The data on the recording is written in the MD while "**WRITING**" is displayed, then the disc is ejected.

While "WRITING" is displayed, do not apply shock or vibration to the unit because information is being written on the Mini Disc.

Pause the recording

- In record-pause mode, press the same key again to resume recording from the same position. Note that the track number increments at this time.
- Recording can also be started by pressing the **rec** key.
- When recording CD playback, pressing the **CD ►/II** key lets both MD recording and CD playback pause temporarily. To resume the CD playback and MD recording together, press the **CD ►/II** key again.

Stop the recording

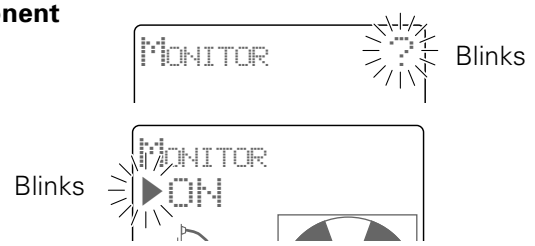


- If the key is pressed during recording from a CD, the CD playback also stops.

Turning the monitor mode ON (External digital component) (MONITOR)

The audio being recorded from an external source component can be listened to (monitored) through this audio system.

❶ Press the menu/demo key.
❷ Rotate the volume/multi-control knob to select "MONITOR ?", then press the set key.
❸ Select "ON" by rotating the multi-control knob, then press the set key.



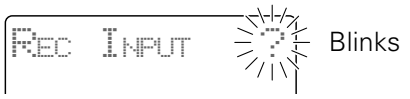
- The audio cannot be monitored while "**READING**" or "**WRITING**" of MD is displayed.

Selecting the recording input signal (REC INPUT)

Select the recording input signal as required.

❶ Press the menu/demo key.
❷ Rotate the volume/multi-control knob to select "REC INPUT ?", then press the set key.
❸ Select the desired recording input signal by rotating the volume/multi-control knob and press the set key.

- When recording from a CD or MD, digital recording of certain discs may be inhibited by the SCMS*. With such a disc, record the **ANALOG** input signal. (*SCMS ➡36)

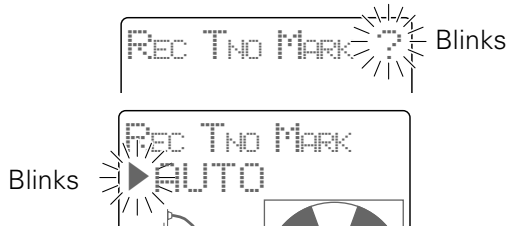


Recorded source	Recording input signal
TUNER	MONO/ANALOG
CD	ANALOG/DIGITAL/MONO
AUX	MONO/ANALOG
AUX(MD)	Digital only

Track number marking in MD recording (REC TNO MARK)

When you press the set key while "REC TNO MARK" is displayed, a menu for selecting whether the track numbers are to be marked automatically during recording (AUTO) or marked manually by yourself during or after recording (MANUAL). Select either option with the volume/multi-control knob and press the set key. The initial setting is "AUTO". The track numbers are used when playing back the recording, searching for a track or programming tracks.

❶ Press the menu/demo key.
❷ Rotate the volume/multi-control knob to select "REC TNO MARK ?", then press the set key.
❸ Select "AUTO" or "MANUAL" by rotating the volume/multi-control knob, then press the set key.



AUTO

Usually, use this position for recording. When CD playback is recorded, the MD track number increments as the CD track changes. When an external input is recorded, the MD track also increments by **"1"** at the moment the input signal which has been below a certain level for more than 2 seconds increases above the level. (When tuner reception is recorded, the track number may sometimes fail to increment due to signal noise, etc.). When recording music containing a continuous section with a very low level, for example when recording classic music, the track number may be incremented by **"1"** after such a section. In this case, cancel the track number later. It is recommended to use the **MANUAL** mode when recording such a kind of music. During digital recording of CD, the track number is incremented automatically by **"1"** according to the data contained in the digital information. The no-sound blank is not detected.
When the CD track number is increased during manual search of a CD, the track number recorded on the MD may sometimes fail to be incremented.
A no sound track may sometimes created at the moment the played CD stops.

MANUAL

With this setting, the MD track number is not incremented automatically during recording. Track numbers can be marked either during editing (by pressing the **TRACK EDIT** key) or after recording (by executing the DIVIDE operation ➡52).
This setting is convenient when recording a CD which has been recorded in live or which contains very low-level sound such as a classical music CD.

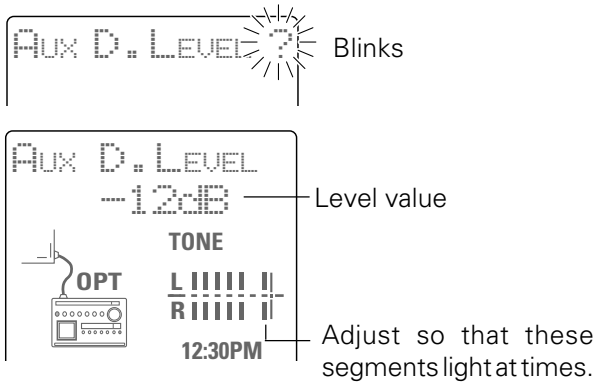
Press during recording.

Basic section

Adjusting the recording level of digital input from the auxiliary source (AUX D. LEVEL)

The level for recording the digital input signal from an auxiliary source component such as a satellite tuner or MD recorder can be adjusted.

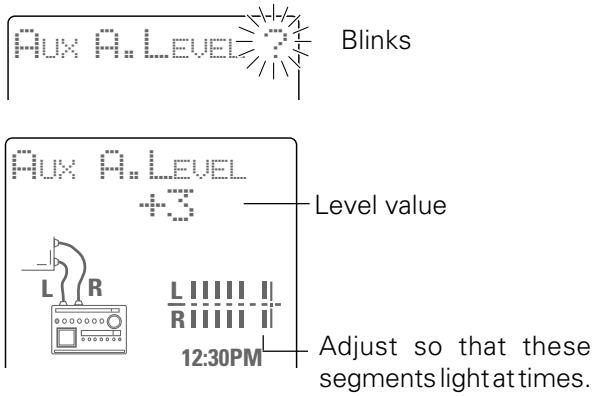
❶ Select the "MD" input. →23
❷ Set the MONITOR mode to "ON". →34
❸ Press the menu/demo key
❹ Rotate the volume/multi-control knob to select "AUX D. LEVEL ?", then press the set key.
❺ Press the display key to display the level meter. →14
❻ Adjust the recording level (-∞ ~ +12) by rotating the volume/multi-control knob.
❼ Press the set key to set the selection.



Adjusting the recording level of analog input from the auxiliary source (AUX A. LEVEL)

The level for recording the analog input signal from an auxiliary source component such as cassette deck can be adjusted.

❶ Select the recording input signal (REC INPUT) as required. →34
❷ Press the menu/demo key.
❸ Rotate the volume/multi-control knob to select "MONITOR ?", then press the set key.
❹ Select "ON" by rotating the volume/multi-control knob, then press the set key.
❺ Press the menu/demo key
❻ Rotate the volume/multi-control knob to select "AUX A. LEVEL ?", then press the set key.
❼ Press the display key to display the level meter. →14
❽ Adjust the recording level (-4 ~ +3) by rotating the volume/multi-control knob.
❾ Press the set key to set the selection.



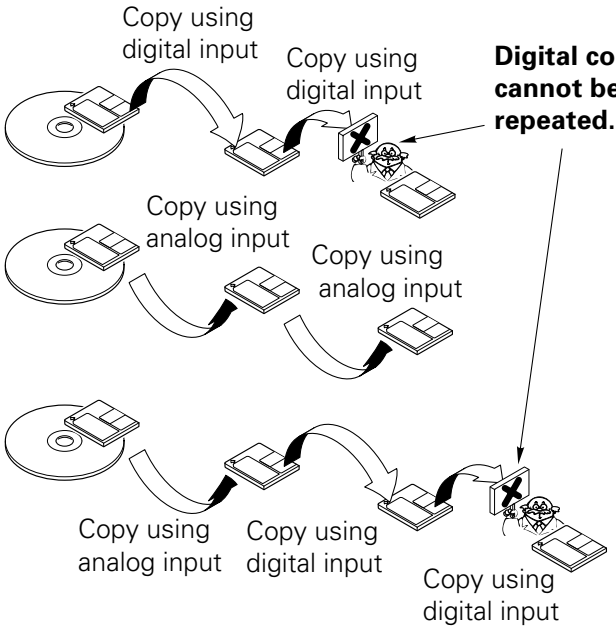
Sampling frequency
Three types of digital signals are usually used according to the sampling frequencies. The sampling frequencies vary depending on the types of digital equipment as shown below.

32 kHz : Standard and long-hour modes of DAT, etc.
44.1 kHz : Standard mode of DAT, CD, MD, etc.
48 kHz : Standard mode of DAT, etc.
(DAT : Digital Audio Tape deck)

In general, high-quality recording based on digital signal transmission is not possible unless the source and recorder components use the same sampling frequency. As this unit has a built-in sampling rate converter, digital signals with 32 kHz and 48 kHz can be recorded by conversion to the MD sampling frequency (44.1 kHz).

Digital recording and SCMS

Designed for copyright protection, the SCMS is a prescription that copying of digital signals as they are in the digital form between digital audio equipment is allowable only for one generation.
Digital recording is not available with commercially marketed music software (CD, MD, etc.) containing the copy prohibit code.


Copy using digital input
Copy using digital input
Digital copy cannot be repeated.
Copy using analog input
Copy using analog input
Copy using analog input
Copy using digital input
Copy using digital input

In regard to display messages

Recording is not possible when one of the following messages is displayed.

Recording is not possible if the following characters are displayed.

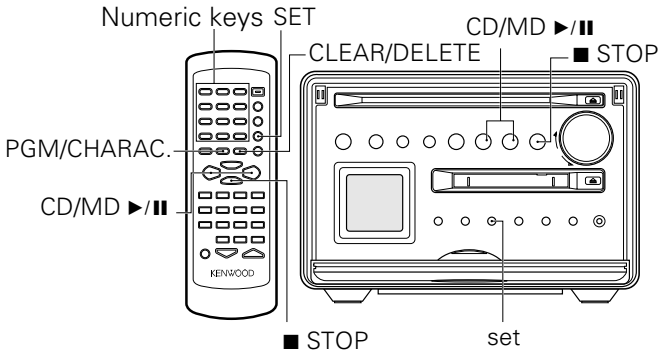
"DISC FULL" : Disc is full
➡ Erase undesired tracks.
→56 →58 →59
"PROTECTED" : The accidental erasure protect tab is open.
➡ Close it. →78
"PLAY ONLY" : A playback-only Mini Disc is loaded.
➡ Load a recordable Mini Disc.
"Please Wait" : An attempt is made to record a CD in less than 74 minutes after high-speed recording of the same CD was started before.
➡ Start high-speed recording after the displayed time has elapsed or record the CD with normal-speed recording.

Digital recording is not possible if the following characters are displayed.

"UNLOCK" : The sampling frequency is not 32 kHz, 44.1 kHz, 48kHz. →36
➡ Use analog recording. →33
: The optical fiber cable is unplugged or loosened. (The connector is not connected.)
➡ Connect the optical fiber cable correctly. →9
"SCMS" : Digital recording is prohibited by SCMS. →36
➡ Use analog recording. →34
"NOT AUDIO" : The input digital signal is not an audio signal.

Listening in the desired sequence (program playback)

Desired tracks in a disc can be programmed in the desired order and played back. (Max. 32 tracks)

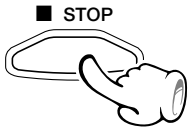


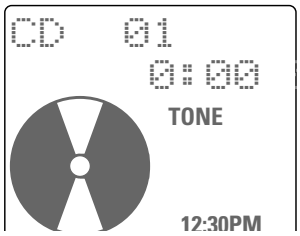
Select the "CD" or "MD" input. →20 →23

1 Check that the unit is in the stop mode.

If it is in play mode

Press the ■ STOP key.





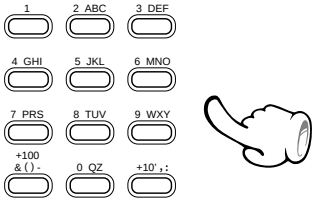
2 Light the "PROGRAM" indicator.

Press the PGM/CHARAC. key.

Lights

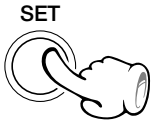
3 Enter track Nos. in the order you want to play them.

❶ Select a track number using numeric keys.



Press the numeric keys as shown below....
To enter track No. 12 .... +10, 2
To select track No. 20 ... +10, +10, 0

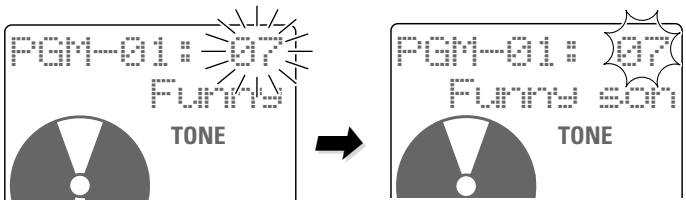
❷ Press the SET key.



❸ Repeat steps ❶ and ❷.

❶ Track selection — Blinks

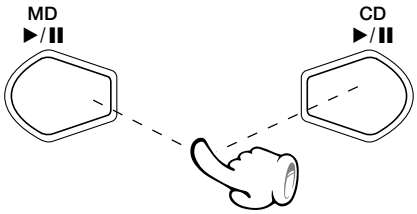
❷ Programming — Lights



- Up to 32 tracks can be programmed. When **"PGM FULL"** is displayed, no more tracks can be programmed.
- If you do not press the **SET** key before the track number display stops blinking, the track number entry is canceled.
- With a CD containing CD text or MD containing title text, the text is displayed scrolling on the LCD.

4 Start playback.

Press the ►/II key.

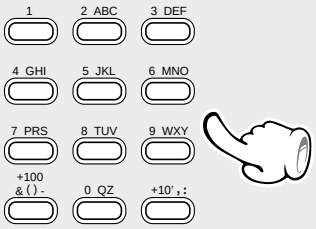


- Tracks will be played in the order they were programmed (in order of **PGM**-Nos.).
- When the I◄◄ or ►►I key is pressed during play, the program will jump to the preceding or the following track respectively.
- When the I◄◄ key is pressed once during playback, the play position returns to the beginning of the current track being played.

To add a track to the program (Remote control unit only)

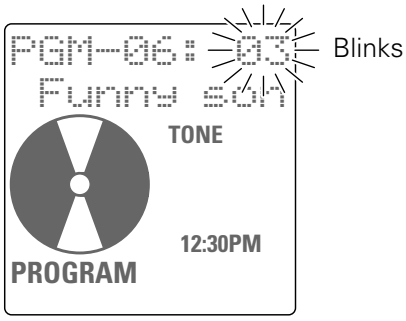
❶ Select the track number to be added using the numeric keys.

Press in stop mode



Press the numeric keys as shown below....
To enter track No. 12 ..... +10, 2
To select track No. 20 .... +10, +10, 0

❷ Press the SET key.



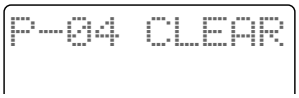
Blinks

- Up to 32 tracks can be programmed. When "**PGM FULL**" is displayed, no more tracks can be programmed.
- When a track No. is entered, the track will be added to the end of the existing program.

To delete a programmed track (Remote control unit only)

Press the CLEAR/DELETE key.

Press in stop mode

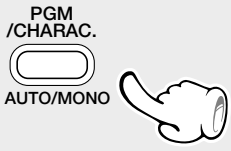


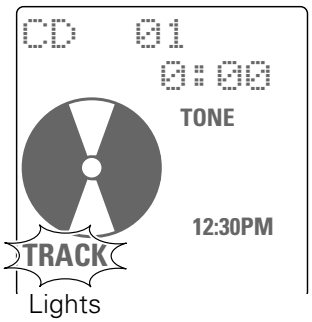
- Each press of the **CLEAR/DELETE** key clears the last track in the program.

To quit the program mode (Remote control unit only)

Press the PGM/CHARAC. key.

Press in stop mode





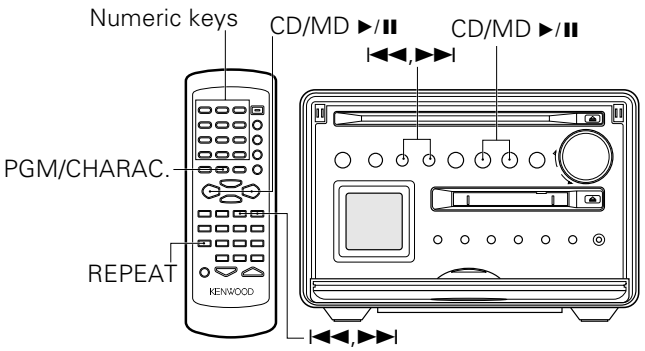
Lights

Notes

- This unit cannot program CD and MD tracks together.
- The set program mode is canceled when the power is turned off.
- The program mode of MD is canceled when recording is started on the MD recorder.

Repeated playback

Desired track(s) or disc can be played repeatedly.

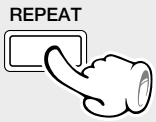


Select the "CD" or"MD" input. →20 →23

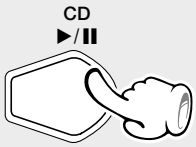
To repeat a disc

❶ **Press the PGM/CHARAC. key so that "TRACK" lights.**

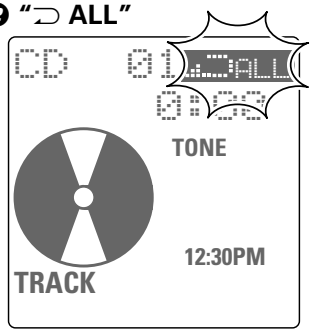
❷ **Press the REPEAT key repeatedly until "⊃ALL" is displayed.**



❸ **Press the ►/II key.**



❷ **"⊃ ALL"**

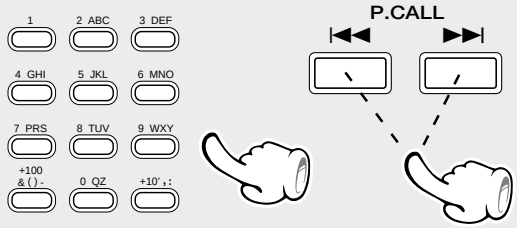


Lights

To repeat a single track

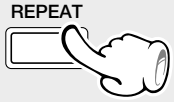
❶ **Press the PGM/CHARAC. key so that "TRACK" lights.**

❷ **Select the track number to be repeated using the numeric keys or the I◄◄ or ►►I key. The CD or MD playback of the selected track will start.**



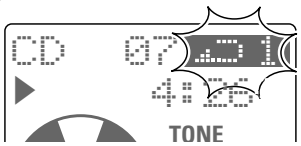
Press the numeric keys as shown below....
To enter track No. 12 ..... +10, 2
To select track No. 20 ..... +10, +10, 0

❸ **During playback, press the REPEAT key repeatedly until "⊃1" is displayed.**



❸ **"⊃1"**

Lights



To repeat selected tracks

❶ **Program the desired tracks by performing the procedure in "Listening in the desired sequence (program playback)" until step 3.** →38

❷ **Press the REPEAT key to select "⊃ALL".**

❸ **Press the ►/II key.**

To stop repeated playback

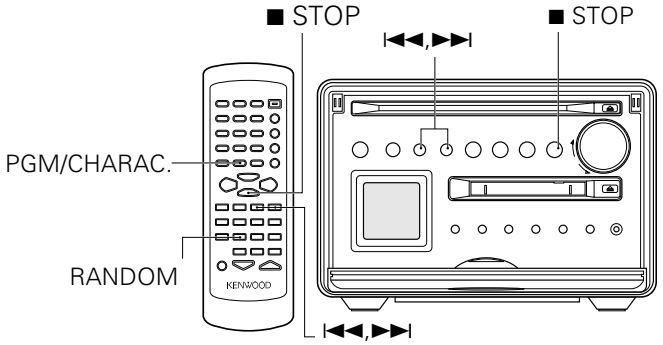
Press the REPEAT key repeatedly until any repeat-related indicator disappears.

- Normal playback will continue even after the "⊃" indicators have turned off.

Playing tracks in a random order

(random playback)

As the titles each time are selected randomly, the music can be enjoyed without getting tired of it.



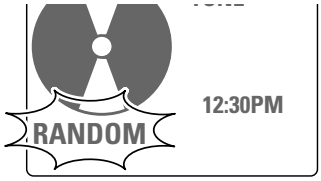
Select the "CD" or "MD" input. →20 →23

1 *Confirm that the "TRACK" indicator is lit.*

Press the PGM/CHARAC. key so that "TRACK" lights.

2 *Start random playback.*

Press the RANDOM key.

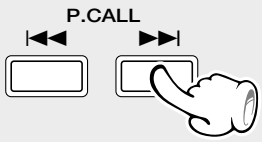


Lights

- Playback stops after each track has been played once.
- When the **REPEAT** key is pressed to select "↻**ALL**", the random playback will be repeated.

To select another track in the middle of playing one

Press the ►►I key.



- Pressing the I◄◄ key once returns to the beginning of the track being played.

To cancel random playback

Press the RANDOM or ■ STOP key during random playback.

- Pressing the **RANDOM** key continues playback of tracks in the order they are recorded, while pressing the ■ **STOP** key stops playback.

Selection of the Recording Type

This unit provides the following recording features in addition to normal recording. Select the appropriate method according to the purpose of recording.

To record a CD simpler and faster

One-touch edit high-speed recording (O.T.E.) (HIGH SPEED) (Main unit only)

All-track high-speed recording (HIGH SPEED) →

Records a CD onto an MD in a short period.
All tracks in a CD can be recorded onto an MD in half the normal playback period. → 43

Single-track high-speed recording (HIGH SPEED) →

Records a CD onto an MD in a short period.
Records only one CD track being played onto an MD in half the normal playback period.
(This is convenient for recording of desired tracks from a disc being heard for the first time.) → 44

To record CD with a simplified method

One-touch edit normal-speed recording (O.T.E.) (NORMAL SPEED)

All-track recording (NORMAL SPEED) →

Records all tracks in a CD onto an MD. → 45

Single-track recording (NORMAL SPEED) →

Records only one CD track being played onto an MD.
(This is convenient for recording of desired tracks from a disc being heard for the first time.) → 45

To record desired CD tracks by reordering them

Program recording (PGM mode + O.T.E.)

Program recording →

Recording of programmed tracks in the programmed order.
(Convenient for recording only the desired CD tracks in the desired order.) → 46

Note After recording an MD, be sure to eject the disc by pressing the ▲ key. The information on the recording is written on the disc before it is ejected.

High-speed recording of all tracks in a CD

One-touch edit high-speed all-track recording (O.T.E.) (HIGH SPEED)
Records a CD onto an MD in a short period. (Main unit only)

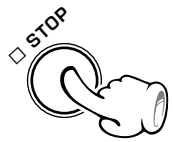
Be sure to put the MD recorder in stop mode

1 Make the preparations for recording.

❶ Insert a recordable disc into the MD recorder.
❷ Insert disc in the CD player.

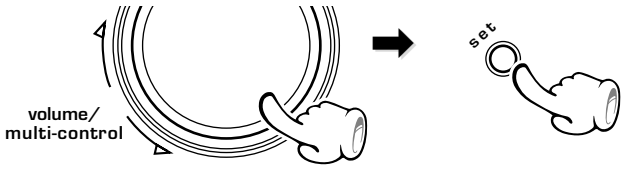
2 Check the current play mode of the CD player.

If it is in play mode, stop it.



3 Start recording.

❶ Press the menu/demo key.
❷ Rotate the volume/multi-control knob to select "CD→MD O.T.E. ?", then press the set key.
❸ Select "HIGH SPEED" by rotating the volume/multi-control knob, then press the set key to start high-speed recording.



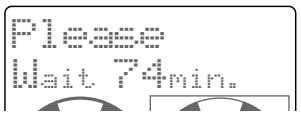
Turning the knob switches the display contents.

① NORMAL SPEED (normal-speed recording)
② HIGH SPEED (high-speed recording)

- During high-speed recording, the CD playback audio is played at a high speed and low volume.
- If you are operating the remote, press the **MD O.T.E.** key. (Only "**NORMAL SPEED**" recording is available from the remote control unit.)
- High-speed recording starts with the first track in the CD and continues until the last track.
- When either high-speed CD playback or MD high-speed recording stops, the other operation also stops.
- The digital input is recorded automatically.

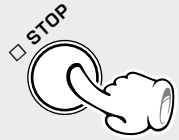
4 After recording , eject the MD.

One high-speed recording starts, it is not permitted to record the same disc with high-speed recording for 74 minutes after the start of recording. If you want to record the same disc immediately, use normal-speed recording.



- **When "HIGH SPEED" is selected in step 3, "● II" is displayed for a few seconds until actual recording starts. If the high-speed recording is canceled by pressing the ■ STOP key in this period, high-speed recording of the same disc can be started without waiting for more 74 minutes.**

To interrupt a recording



(Recording and playback will be stopped.)

While "WRITING" is displayed, do not apply shock or vibration to the unit because information is being written on the Mini Disc.

High-speed recording of a single track in a CD

One-touch edit high-speed a single-track recording (O.T.E.) (HIGH SPEED)
Records a CD onto an MD in a short period. (Main unit only)

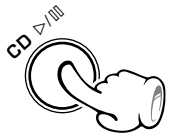
Be sure to put the MD recorder in stop mode

1 Make the preparations for recording.

❶ Insert a recordable disc into the MD recorder.
❷ Insert disc in the CD player.

2 Check the current play mode of the CD player.

Select the desired CD track and play it.

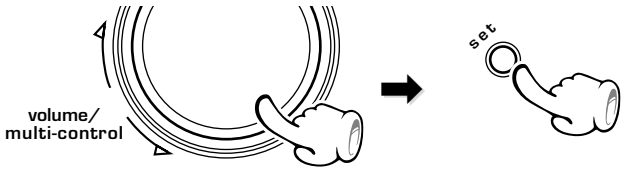


3 Start recording.

❶ Press the menu/demo key.

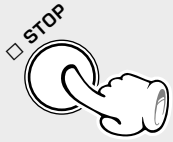
❷ Rotate the volume/multi-control knob to select "CD→MD O.T.E. ?", then press the set key.

❸ Select "HIGH SPEED" by rotating the volume/multi-control knob, then press the set key to start high-speed recording.



4 After recording , eject the MD.

To interrupt a recording



(Recording and playback will be stopped.)

While "WRITING" is displayed, do not apply shock or vibration to the unit because information is being written on the Mini Disc.

Turning the knob switches the display contents.

① NORMAL SPEED (normal-speed recording)
② HIGH SPEED (high-speed recording)

- During high-speed recording, the CD playback audio is played at a high speed and low volume.
- If you are operating the remote, press the **MD O.T.E.** key. (Only "**NORMAL SPEED**" recording is available from the remote control unit.)
- Even when the recording is started in the middle of the track, playback restarts and recording start from the beginning of the track.
- After the track has been recorded, the MD recorder stops and the CD player enters pause mode.
- When either high-speed CD playback or MD high-speed recording stops, the other operation also stops.
- The digital input is recorded automatically.

One high-speed recording starts, it is not permitted to record the same disc with high-speed recording for 74 minutes after the start of recording. If you want to record the same disc immediately, use normal-speed recording.

- **When "HIGH SPEED" is selected in step 3, "● II" is displayed for a few seconds until actual recording starts. If the high-speed recording is canceled by pressing the ■ STOP key in this period, high-speed recording of the same disc can be started without waiting for more 74 minutes.**

One-touch recording

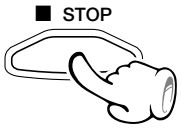
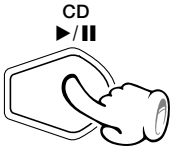
One-touch edit normal-speed recording (O.T.E.) (NORMAL SPEED)
Records all tracks in a CD with a simple operation. (All-track recording)
Records a single CD track being played from the beginning. (Single-track recording)

Be sure to put the MD recorder in stop mode

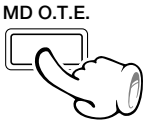
1 Make the preparations for recording.

❶ Insert a recordable disc into the MD recorder.
❷ Insert disc in the CD player.

2 Check the current play mode of the unit.

All track recording	Single-track recording
If it is in play mode, stop it. 	**Select the desired CD track and play it.**  ● Even when the recording is started in the middle of the track, playback restarts and recording start from the beginning of the track.

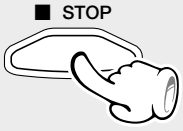
3 Start recording.



- After the track has been recorded, the MD recorder stops and the CD player enters pause mode.
- When either CD playback or MD recording stops, the other operation also stops.
- The digital input is recorded automatically.
- When you are operating the main unit, select "**CD→MD O.T.E.**" in the menu mode, then select "**NORMAL SPEED**" and press the **set** key to start recording.

4 After recording , eject the MD.

To interrupt a recording



(Recording and playback will be stopped.)

While "WRITING" is displayed, do not apply shock or vibration to the unit because information is being written on the Mini Disc.

Program recording (PGM mode+O.T.E.)

Desired CD tracks can be programmed in the desired sequence and recorded onto an MD.

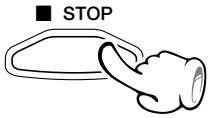
Be sure to put the MD recorder in stop mode

1 Make the preparations for recording.

❶ Insert a recordable disc into the MD recorder.
❷ Insert disc in the CD player.

2 Check the current play mode of the CD player.

If it is in play mode, stop it.

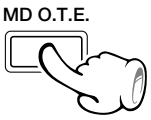


3 Program the desired sequence of CD tracks.

Perform steps 2 and 3 of the procedure in "Listening in the desired sequence (program playback)".

→ 38

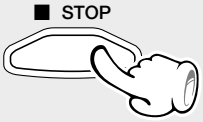
4 Start recording.



- Recording begins from the first track in the program and completes when the entire program has been recorded.
- Recording stops automatically when the program playback of the CD completes.

5 After recording , eject the MD.

To interrupt a recording



(Recording and playback will be stopped.)

Note

While "WRITING" is displayed, do not apply shock or vibration to the unit because information is being written on the Mini Disc.

MD Edit Functions

Selecting the editing function type

After recording of a commercially-available recordable Mini Disc, the recording can be edited in various ways. Note that it is impossible to edit a playback-only Mini Disc.

The MD recorder acts based on the data loaded from the disc into the memory. As this data is written in the disc at the moment it is ejected, be sure to eject the disc every time after the title input or editing operation.

Function Limitations because of the MD Standard

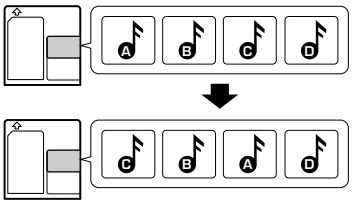
Some of the functions are limited because of the MD standard. Please check "Symptoms related to MD standard" before assuming a malfunction. →80

Before using the editing function, press the PGM/CHARAC. key so that "TRACK" lights.

Reordering tracks by moving them

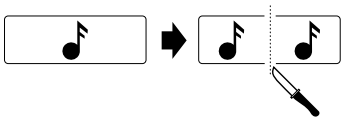
Reordering several tracks at a time (QUICK MOVE) →48

Moving the order of the track being played in a disc (MOVE) →50

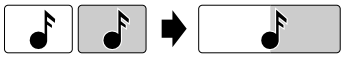


Dividing a track, combining two tracks

Dividing a track during playback (DIVIDE) →52

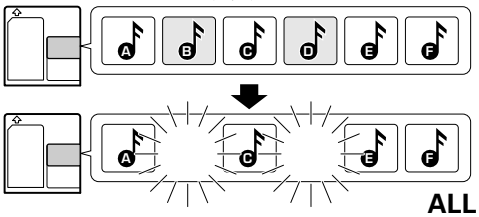


Combining tracks during playback (COMBINE) →54

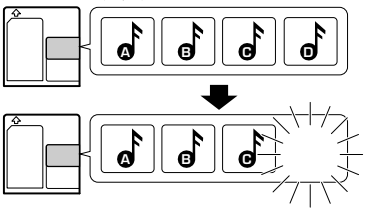


Erasing track(s)

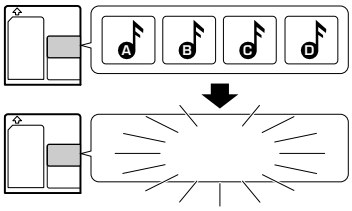
Erasing several tracks at a time (QUICK ERASE) →56



Erasing a single track during playback (ERASE) →58



ALL ERASE →59



Assigning a Title to a Disc or a Track →60

Copying a Disc or Track Title in a Title Memo (TITLE COPY) →65

Entering characters in title memo (TITLE MEMO) →67

Title input is possible simply by selecting one character after another from the characters shown on the display. As the entered title is compatible between models, it will be displayed also when the disc is set into a different MD recorder (player). (The title compatibility is limited partly according to the character types which can be displayed, the number of characters, etc.)

To delete the edited contents (EDIT CANCEL) →68

Reordering several tracks at a time (QUICK MOVE)

Use the following procedure to reorder several tracks in a disc simultaneously by selecting them.

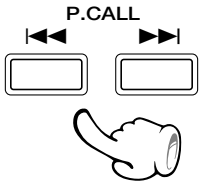
Before using the editing function, press the PGM/ CHARAC. key so that "TRACK" lights.

Please execute operation in stopped condition.

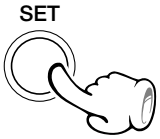
1 *Select "Q.MOVE ?".*

❶ Press the TRACK EDIT key .

❷ Select "Q.MOVE ?".



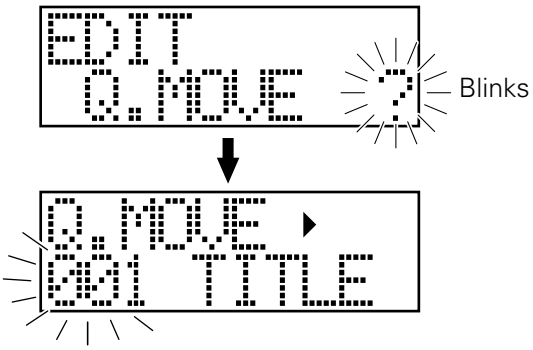
❸ Set it.



Each press of the |◄◄ or ►►| keys switches the operation.

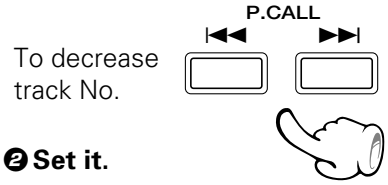
① **Q.MOVE ?**
② **Q.ERASE ?**
③ **CANCEL ?**

- Editing is aborted if no operation has been performed for 8 seconds.

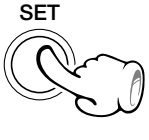


2 *Select track numbers in the new order you want.*

❶ Select a track number.

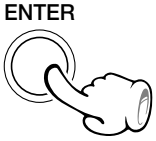


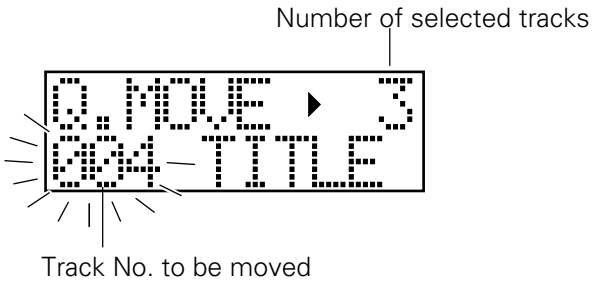
❷ Set it.



❸ Repeat steps ❶ and ❷ above.

❹ Complete the selection of track numbers to be reordered.



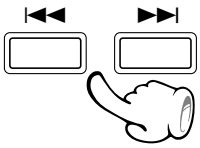


- Up to 32 tracks can be selected.
- Pressing the ◄◄ or ►► key allows to check the current order of tracks.
- Press the **CLEAR/DELETE** key to clear the last selected track number.

3 Execute the track reordering operation.

❶ Select the move destination.

P.CALL



❷ Set it

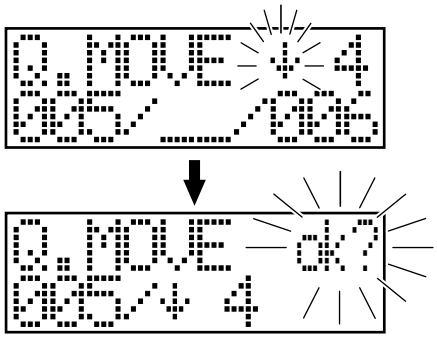
SET

❸ Reorder tracks.

ENTER

- The title is scrolled if present.

Example for moving between tracks No. 5 and No. 6



Display after execution

"EDIT NOW" : Editing
"COMPLETE" : When editing is completed successfully
"CAN'T EDIT" : When editing is impossible

4 Eject the Mini Disc.

Even after completing MD editing, it is still possible to cancel the settings in the current editing session and restore the disc to the condition it was loaded last time.
Note that this is possible provided that the MD is not ejected yet. →68

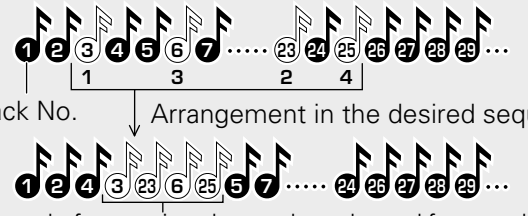
Information is being written.

Mini Disc has been ejected.

Note

While "WRITING" is displayed, do not impact or move the unit because information about recording and editing is being written to the Mini Disc.

Image of Quick Move operation



Example for moving the tracks selected for reordering to the position between tracks No. 4 and No. 5 (step 3)

Moving the order of the track being played in a disc (MOVE)

This procedure shows you how to play and move a track to the track number you desire. The surrounding tracks are renumbered automatically.
Repeating this procedure lets you arrange the tracks in the order you desire.

Before using the editing function, press the PGM/CHARAC. key so that "TRACK" lights.

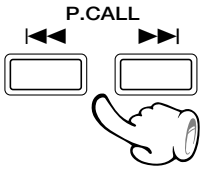
Be sure to put the MD recorder in stop or pause mode.

1 *Select "MOVE ?".*

❶ Press the TRACK EDIT key.

- If the operation is started during playback, it pauses automatically.

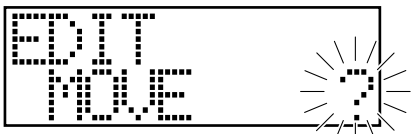
❷ Select "MOVE ?".



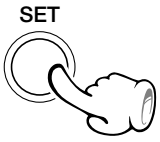
Each press of the |◄◄ or ►►| keys switches the operation.

① **DIVIDE ?**
② **COMBINE ?**
③ **ERASE ?**
④ **MOVE ?**

- Editing is aborted if no operation has been performed for 8 seconds.



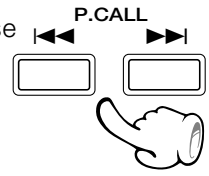
❸ Set it.



2 *Select the moving destination track.*

❶ Select the track number.

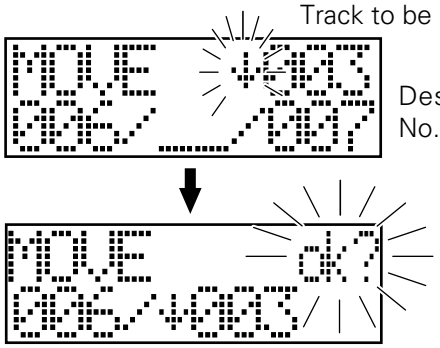
To decrease track No.



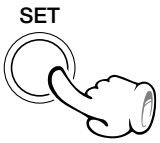
To increase track No.

- The title is scrolled if present.

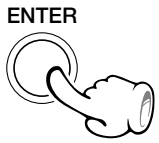
Example for moving between tracks No. 6 and No. 7



❷ Set it.



3 Move the track.



Display after execution

"EDIT NOW" : Editing
"COMPLETE" : When editing is completed successfully
"CAN'T EDIT" : When editing is impossible

4 Eject the Mini Disc.

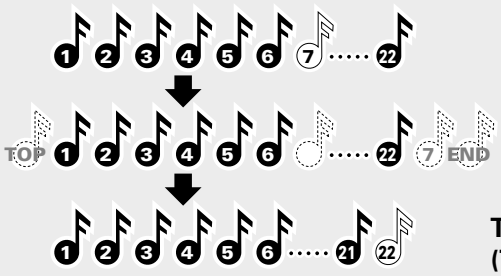
Even after completing MD editing, it is still possible to cancel the settings in the current editing session and restore the disc to the condition it was loaded last time.
Note that this is possible provided that the MD is not ejected yet. →68

Information is being written.

Mini Disc has been ejected.

While "WRITING" is displayed, do not impact or move the unit because information about recording and editing is being written to the Mini Disc.

Image of track reordering by Move



Select the track to be moved.

Select the move destination.

The track has been moved.
(The track numbers are readjusted.)

Dividing a track during playback (DIVIDE)

Use the following procedure to divide a track into two by inserting a track number in its middle. For example, by inserting an additional track number before the passage you are specially fond of, it is easy to skip to there when you play the disc later. Note that the track numbers of the tracks located after the divided track are automatically incremented.
The preview function can be used for fine adjustment while repeatedly listening to the track division point.

Before using the editing function, press the PGM/ CHARAC. key so that "TRACK" lights.

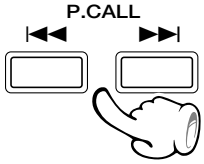
Be sure to put the MD recorder in stop or pause mode.

1 ***Play the track to be divided.***

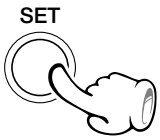
2 ***Press the TRACK EDIT key at the desired position.***

❶ Press the TRACK EDIT key

❷ Select "DIVIDE ?"



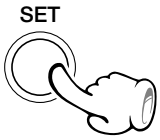
❸ Set it



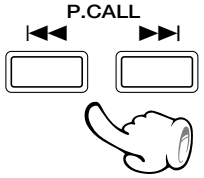
If no preview is to be performed, press the ENTER key once and then go to step 4.

3 ***When preview is to be performed.***

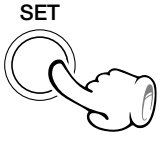
❶ Preview execution



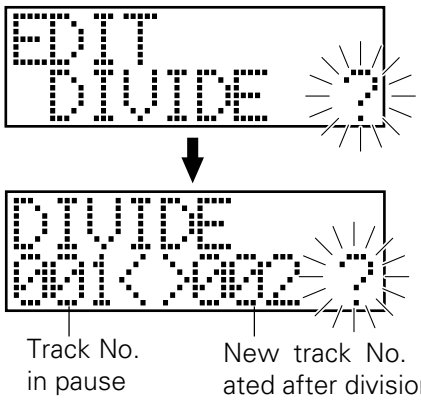
❷ Perform fine adjustment of the division point.

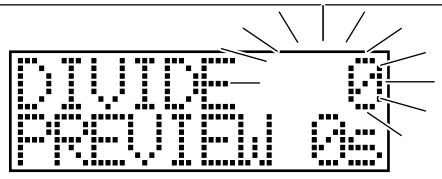


❸ Decide the division point.

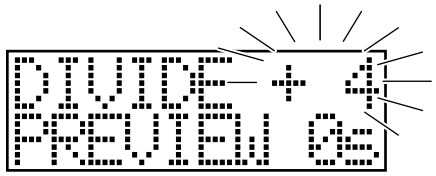


- When dividing a track, set the dividing point at more than about 2 seconds after the beginning of the track.
  Track division is sometimes impossible if one of the divided section becomes shorted than about 2 seconds.
- If the operation is started during playback, it pauses automatically.
- Editing is aborted if no operation has been performed for 8 seconds.

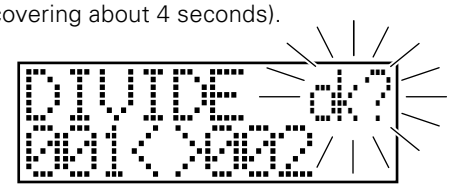




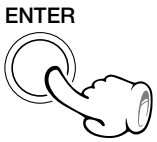
- Repeated playback from the division point will be performed for about 3 sec.



- The dividing point can be fine-adjusted in 60 ms (6/100 sec.) steps, between -31 and +31 assuming that the point where the **TRACK EDIT** key was pressed is 0 (i.e. in the range covering about 4 seconds).



4 *Execute the track divide operation.*



Display after execution

"EDIT NOW" : Editing
"COMPLETE" : When editing is completed successfully
"CAN'T EDIT" : When editing is impossible

- There is no blank space left between the two tracks.
- Track division may sometimes be impossible due to the limitations of the MD standard.
- The MD recorder enters pause mode at the beginning of the track newly created by division.

Up to 255 track numbers can be inserted additionally by repeating 1 to 4 for each of them.

5 *Eject the Mini Disc.*

Even after completing MD editing, it is still possible to cancel the settings in the current editing session and restore the disc to the condition it was loaded last time.
Note that this is possible provided that the MD is not ejected yet. → 68

Information is being written.

Mini Disc has been ejected.

While "WRITING" is displayed, do not impact or move the unit because information about recording and editing is being written to the Mini Disc.

Image of divide

Should be approx. 2 sec. or longer.

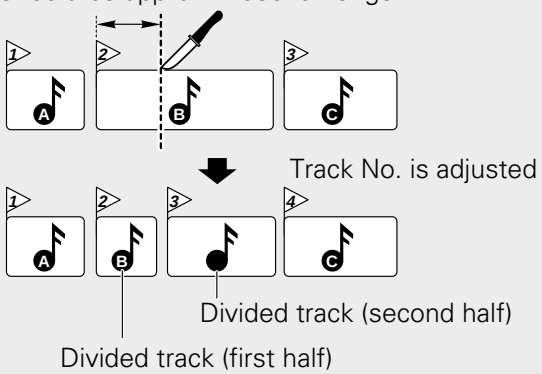
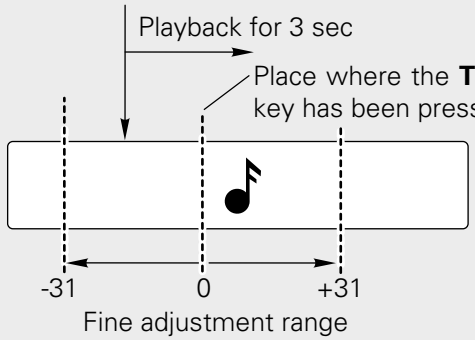


Image of preview

Point selected by fine adjustment of dividing point



Combining tracks during playback (COMBINE)

Use the following procedure to combine two tracks into one by deleting a track number. This operation allows to connect several tracks or a piece of music divided into several parts. After this operation, the track numbers of tracks located after the combined tracks are decreased automatically.

Before using the editing function, press the PGM/ CHARAC. key so that "TRACK" lights.

Be sure to put the MD recorder in stop or pause mode.

1 *Play the title to be combined.*

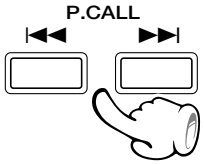
2 *Select "COMBINE ?".*

❶ Press the TRACK EDIT key

TRACK EDIT

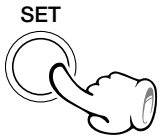
❷ Select "COMBINE ?".

P.CALL



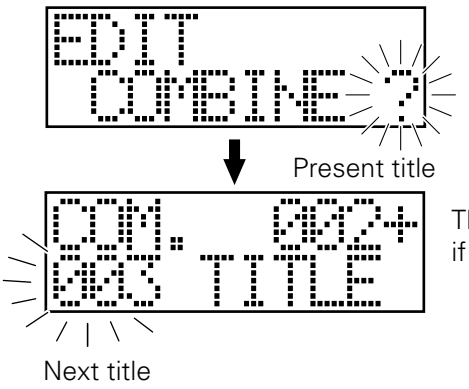
❸ Set it.

SET



When the title being played is to be combined with the next title, press the ENTER key and then go to step ❹.

- If the operation is started during playback, it pauses automatically.
- Editing is aborted if no operation has been performed for 8 seconds.



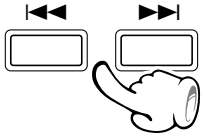
The title is scrolled if present.

3 *For combining with a different title*

❶ Select the track number.

P.CALL

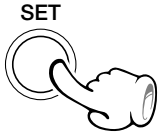
To decrease track No.



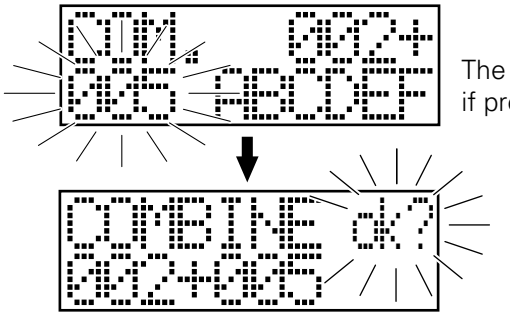
To increase track No.

❷ Set it.

SET

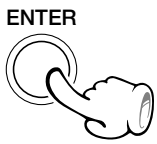


Connecting tracks 2 and 5.



The title is scrolled if present.

4 Execute the track combine operation.



Display after execution

"EDIT NOW" : Editing
"COMPLETE" : When editing is completed successfully
"CAN'T EDIT" : When editing is impossible

- Track combining may sometimes be impossible due to the limitations of the MD standard.
- The MD recorder enters pause mode at the beginning of the track newly created by combination.

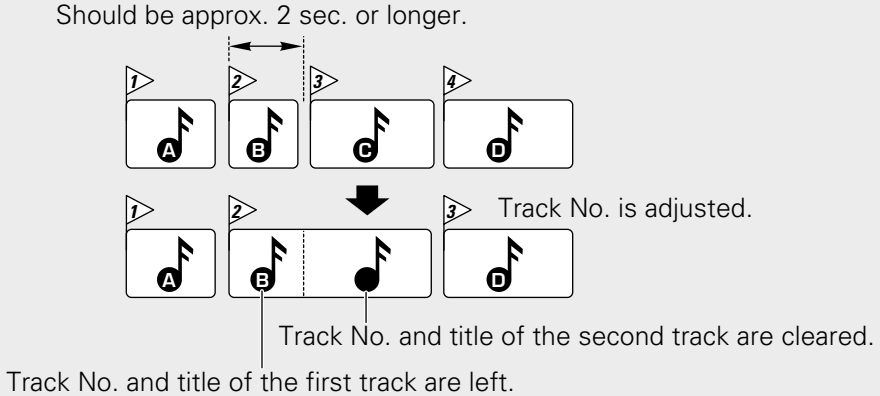
5 Eject the Mini Disc.

Even after completing MD editing, it is still possible to cancel the settings in the current editing session and restore the disc to the condition it was loaded last time.
Note that this is possible provided that the MD is not ejected yet. → 68

Information is being written. Mini Disc has been ejected.

While "WRITING" is displayed, do not impact or move the unit because information about recording and editing is being written to the Mini Disc.

Image of track combination



Erasing several tracks at a time (QUICK ERASE)

The selected track can be erased while the player is stop mode. Be careful in using this operation because the erased tracks may not be recovered once it has been erased.

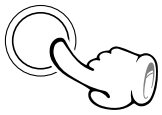
Before using the editing function, press the PGM/ CHARAC. key so that "TRACK" lights.

Please execute operation in stopped condition.

1 Select "Q. ERASE ?".

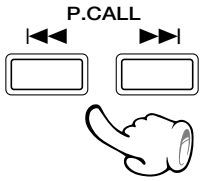
❶ **Press the TRACK EDIT key.**

TRACK EDIT



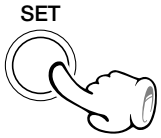
❷ **Select "Q.ERASE ?".**

P.CALL

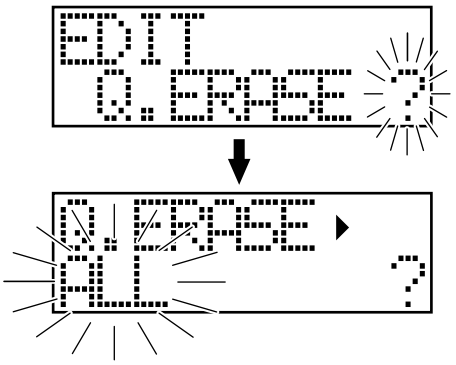


❸ **Set it.**

SET



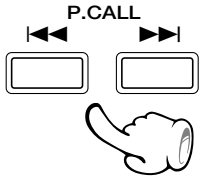
- Editing is aborted if no operation has been performed for 8 seconds.



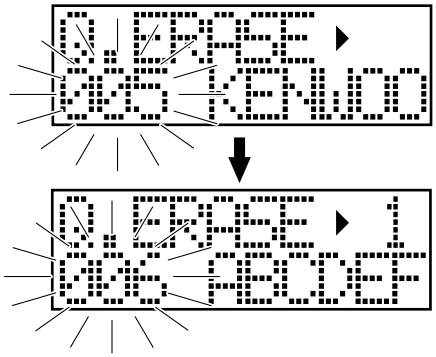
2 Select the title to be erased.

❶ **Select the title to be erased.**

P.CALL



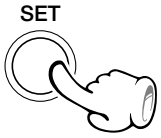
The title to be erased will be displayed.



The title is scrolled if present.

❷ **Set it.**

SET

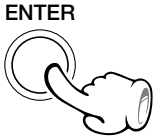


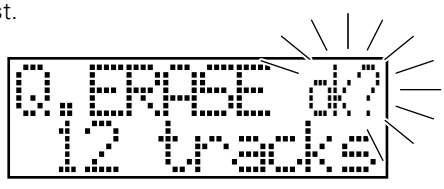
- Up to 32 tracks can be selected.
- Pressing the ◄◄ or ►► keys allow to check the current order of tracks.
- When the **CLEAR/DELETE** key is pressed, the last selected track in the list of tracks to be erased will be cleared from the list.

❸ **Repeat steps ❶ and ❷ above.**

❹ **End the selection.**

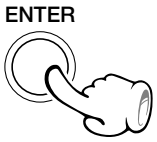
ENTER





Number of tracks to be deleted

3 Execute the track erasure operation.



Display after execution
"EDIT NOW" : Editing
"COMPLETE" : When editing is completed successfully
"CAN'T EDIT" : When editing is impossible

4 Eject the Mini Disc.

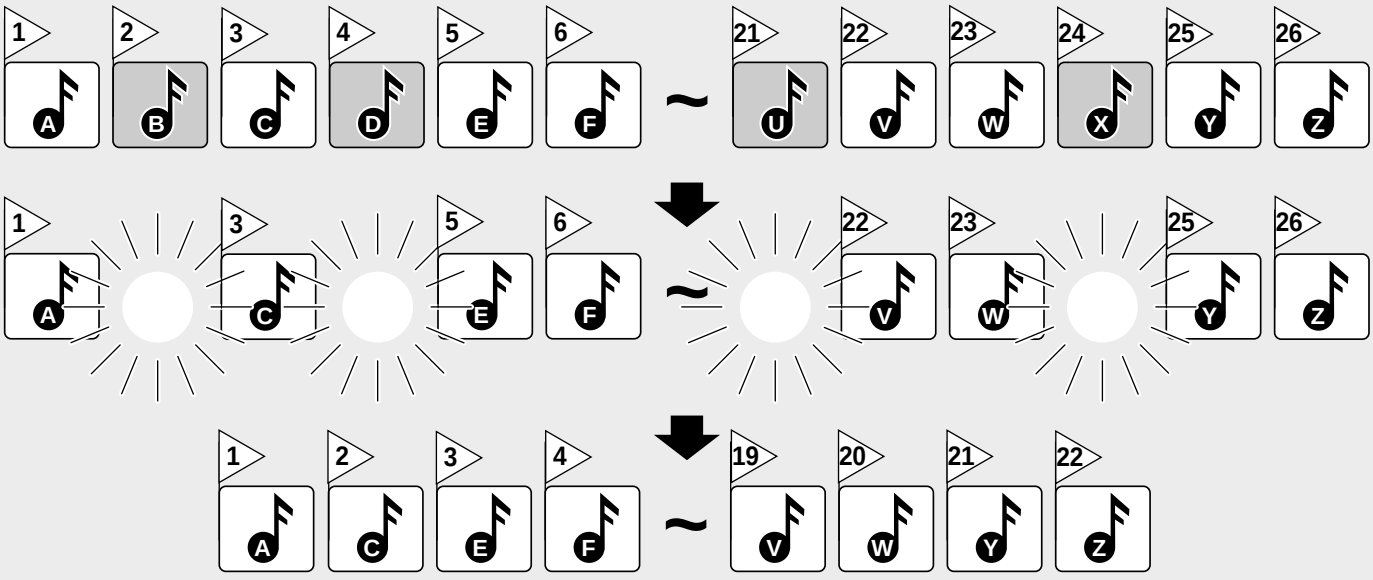
Even after completing MD editing, it is still possible to cancel the settings in the current editing session and restore the disc to the condition it was loaded last time.
Note that this is possible provided that the MD is not ejected yet. → 68

Information is being written.

Mini Disc has been ejected.

Note
While "WRITING" is displayed, do not impact or move the unit because information about recording and editing is being written to the Mini Disc.

Image of erasing several tracks at a time (QUICK ERASE)



Erasing a single track during playback (ERASE)

During playback, it is possible to erase only the track being played. The track numbers of the tracks after the erased track will be adjusted.
Be careful in using this operation because a track cannot be recovered once it has been erased.

Before using the editing function, press the PGM/ CHARAC. key so that "TRACK" lights.

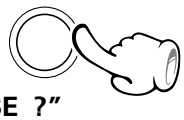
Be sure to put the MD recorder in stop or pause mode.

1 *Play the track to be erased.*

2 *Select "ERASE ?".*

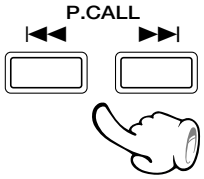
❶ Press the TRACK EDIT key

TRACK EDIT



❷ Select "ERASE ?"

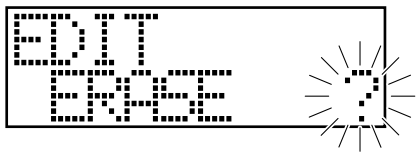
P.CALL



❸ Set it.

SET

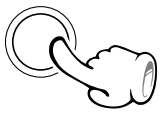
- Editing is aborted if no operation has been performed for 8 seconds.



3 *Execute the track erasure operation.*

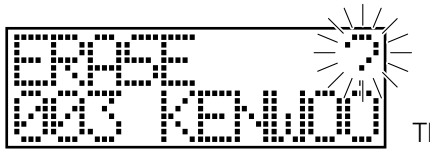
❶ Confirmation of erasing

SET



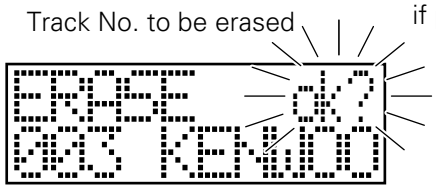
❷ Execute the track erasure operation.

ENTER



Track No. to be erased

The title is scrolled if present.



- The track being played is erased (together with its track title).

4 *Eject the Mini Disc.*

Even after completing MD editing, it is still possible to cancel the settings in the current editing session and restore the disc to the condition it was loaded last time.
Note that this is possible provided that the MD is not ejected yet. →68

Information is being written.

Mini Disc has been ejected.

Note While "WRITING" is displayed, do not impact or move the unit because information about recording and editing is being written to the Mini Disc.

Erasing all tracks on a disc (ALL ERASE)

During stop, all tracks can be erased. Be careful in using this operation because the tracks cannot be recovered once the entire minidisc has been erased.

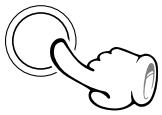
Before using the editing function, press the PGM/ CHARAC. key so that "TRACK" lights.

Please execute operation in stopped condition.

1 Select "Q. ERASE ?".

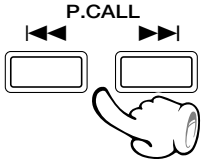
❶ Press the TRACK EDIT key

TRACK EDIT



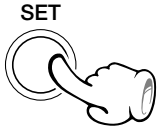
❷ Select "Q. ERASE ?"

P.CALL

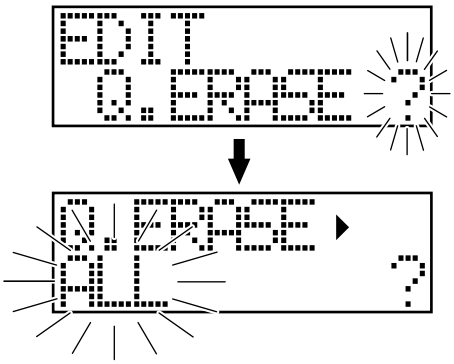


❸ Set it.

SET



- Editing is aborted if no operation has been performed for 8 seconds.



2 Press the SET key

Press while "ALL ?" is displayed.

SET

3 Execute the track erasure operation.

ENTER

Display after execution
"EDIT NOW" : Editing
"COMPLETE" : When editing is completed successfully
"CAN'T EDIT" : When editing is impossible

4 Eject the Mini Disc.

Even after completing MD editing, it is still possible to cancel the settings in the current editing session and restore the disc to the condition it was loaded last time.
Note that this is possible provided that the MD is not ejected yet. →68

Information is being written. Mini Disc has been ejected.

Note While "WRITING" is displayed, do not impact or move the unit because information about recording and editing is being written to the Mini Disc.

Assigning a title to a disc or track *(Remote control unit only)*

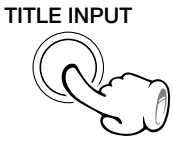
When titles are assigned to a disc and its tracks, the titles cannot only be displayed during playback but title search (searching a track by the title) is also made possible. The assigned titles can be changed or deleted with the same procedure.

Before using the editing function, press the PGM/ CHARAC. key so that "TRACK" lights.

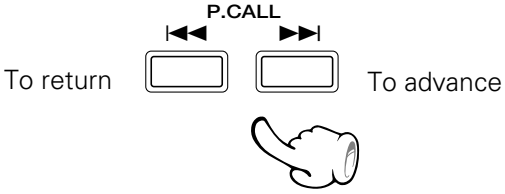
Select the "MD" input. →23

1 *Activate the title input mode.*

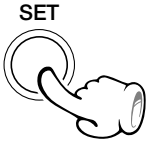
❶ Press the TITLE INPUT key.



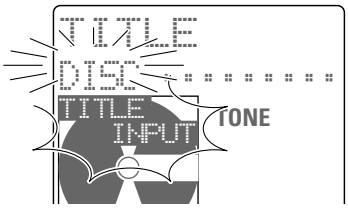
❷ Select the title to be edited.



❸ Set the selection.



To abort operation, press the TITLE INPUT key again.



Each press of the ⏮ or ⏭ keys switches the operation.

- ① **DISC ••••••••••••••• (Disc title) *1**
- ② **001, 002, •••••••••••• (Track title) *2**
- ③ **ALL ERASE ? ••••• (Complete erasure of disc and track titles)**
- ④ **[1], [2], [3] ••••••••• (Title Memo) *3**

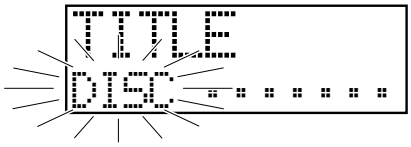
*1 When step **1**-❶ is performed in stop mode, the display starts with the disc title.

*2 Each press of the ⏮ or ⏭ key displays a track title in sequence from "**001**", "**002**".... When all track titles have been displayed, ③ then ④ will be displayed.
When step **1**-❶ is performed in play mode, the display begins with the information on the track being played.

*3 Each press of the ⏮ or ⏭ key causes the selected title memo number to blink, after which ① then ② will be displayed.

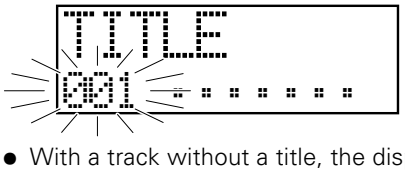
In case of disc title :

Select **"DISC"**.



In case of track title :

Select the desired track No.
(The track can also be selected using the numeric keys.)



- With a track without a title, the display shows **"·····"**.

Total number of title characters

Up to 1792 characters can be input per disc and up to 80 characters can be input per track. (In case of alphanumeric and symbol characters)
A space (blank character) also required the same amount of data as alphanumeric characters. When deleting a title, it is not recommended to overwrite spaces on previous characters but use the (CLEAR/ DELETE) function. →61 →62

Characters can be selected either in the "character input key mode" or "skip key mode".

2 *Input the title.*

To select characters with the numeric keys (character input key mode)

If none of Aa or 12 is displayed, press one of the numeric keys.

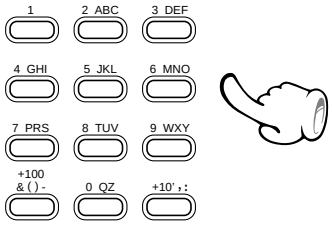
To enter a title

❶ Select a character group.

Press the PGM/CHARAC. key for the required number of times to select one of the character groups below. →64

- **Aa : A~Z, symbols, Title Memo ([1], [2], [3])**
- **12 : 0~9, symbols**

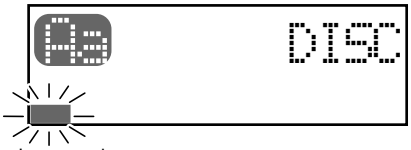
❷ Select a character.



When the same key is pressed repeatedly, the characters will change.

(Example : When 2 ABC is pressed, the characters will change in the order of **A→B→C→a→b→c**.)

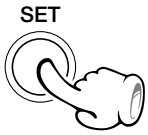
- If you made a mistake, press the **CLEAR/DELETE** key.

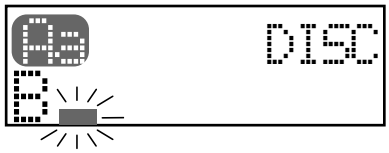


Input place

- Use the ◄◄ or ►► key to move the input position cursor to the left or right.
- To enter a space character, press the **TIME/SPACE** key.

❸ Set the selected character.





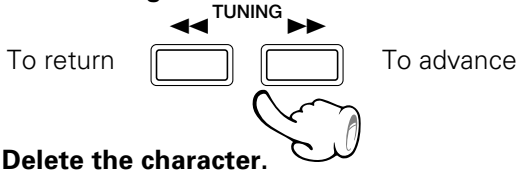
The cursor moves and stands by for the next character input.

- The character can be set also by pressing another numeric key, ►► key or the **PGM/CHARAC.** key.

❹ Repeat steps ❶ to ❸ above.

To change or clear a title

❶ Move the character to the desired character (to be changed).



❷ Delete the character.

- If you want to insert a character without deleting any (step ❷), place the cursor on the character immediately after the position you want to insert a character.

❸ Perform steps ❶ to ❹ of "To enter a title".

Continued on next page

Characters can be selected either in the "character input key mode" or "skip key mode".

To select characters with the I◄◄ and ►►I keys (skip key mode)

If any of Aa or 12 is displayed, press the I◄◄ or ►►I key.

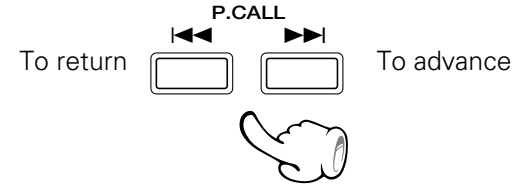
To enter a title

❶ Select a character group.

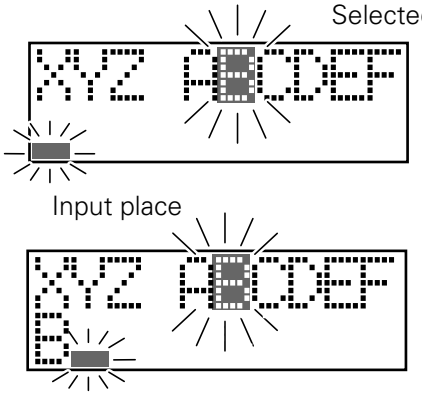
Press the PGM/CHARAC. key for the required number of times to select one of the character groups below. →64

- **A~Z, space (1 blank character)**
- **a~z, space**
- **0~9, symbols**
- **Title Memo ([1 2 3]), Title Copy (disc title, track title)**

❷ Select a character.

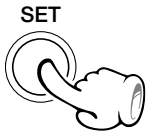


- The display can be scrolled so that any character (in a single group) can be selected.



The cursor moves and stands by for the next character input.

❸ Set the selected character.

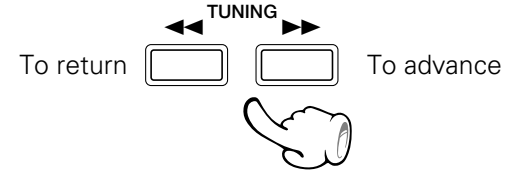


- To enter a space character, press the **TIME/SPACE** key.

❹ Repeat steps ❶ to ❸ above.

To change or clear a title

❶ Move the character to the desired character (to be changed).



- If you want to insert a character without deleting any (step ❷), place the cursor on the character immediately after the position you want to insert a character.

❷ Delete the character.

❸ Perform steps ❶ to ❹ of "To enter a title".

3 Execute title change or deletion.

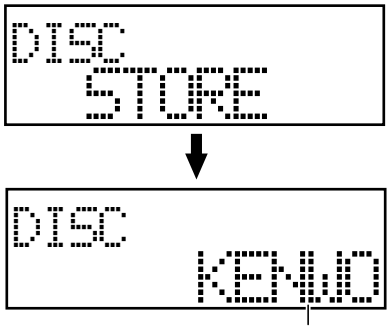
❶ Enter the title in memory.

ENTER

- If required, enter other titles by repeating steps 1-❷ to 3-❶ for each title.

❷ Complete the operation.

TITLE INPUT



The title is scrolled automatically.

4 Eject the Mini Disc.

Even after completing MD editing, it is still possible to cancel the settings in the current editing session and restore the disc to the condition it was loaded last time.
Note that this is possible provided that the MD is not ejected yet. →68

Information is being written.

Mini Disc has been ejected.

Note

While "WRITING" is displayed, do not impact or move the unit because information about recording and editing is being written to the Mini Disc.

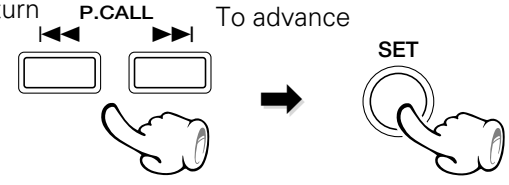
Erasing all titles

❶ Press the TITLE INPUT key.

TITLE INPUT

❷ Select "ALL ERASE ?".

To return P.CALL To advance



Each press of the |◄◄ or ►►| keys switches the operation.

- ① **DISC ••••••••••••••• (Disc title)**
- ② **001, 002, •••••••••• (Track title)**
- ③ **ALL ERASE ?••••• (Complete erasure of disc and track titles)**
- ④ **[1], [2], [3] ••••••••• (Title Memo)**

❸ Press the ENTER key.

ENTER

❹ Complete the operation.

TITLE INPUT

In regard to key function

|◄◄ or ►►| key

Moves the cursor position.

CLEAR/DELETE key

Deletes the character on the cursor position and shifts the subsequent characters leftward by one column. An entire title can be deleted easily by pressing the key repeatedly (or holding it depressed).

List of characters available for title editing

The following alphabets and symbols can be selected for use in title editing.

When selecting characters with the numeric keys on the remote control unit

(character input key mode)

key \ group	Aa	12
1	Space **[1] [2] [3]**	**1**
2ABC	**ABCabc**	**2**
3DEF	**DEFdef**	**3**
4GHI	**GHIghi**	**4**
5JKL	**JKLjkl**	**5**
6MNO	**MNOmno**	**6**
7PRS	**PRSprs**	**7**
8TUV	**TUVtuv**	**8**
9WXY	**WXYwxy**	**9**
0QZ	**QZqz**	**0**
', : ? +10	**', : ? ! ; . " _ ` $ ^**	
& ( ) – / +100	**& ( ) – / + * = < > # % @**	

- Title Copy cannot be selected with the numeric keys.
- The first alphabet which appears when a character input key is pressed may sometimes be an uppercase or sometimes a lowercase letter depending on each occasion.

When selecting characters with the |◄◄ and ►►| keys on the remote control unit

(skip key mode)

English uppercase letter group	**ABCDEFGHIJKLMNOPQRSTUVWXYZ** Space
English lowercase letter group	**abcdefghijklmnopqrstuvwxyz** Space
Numeral/symbols group	**0123456789** Space **! " # $ % & ' ( ) * + , – . / : ; < = > ` ? @ ^ _**
Title Memo/Title Copy group	**[1] [2] [3] [DISC] ([001]•••••)**

Copying titles in title memos for use as titles of other MDs or tracks *(TITLE COPY) (TITLE MEMO) (Remote control unit only)*

To make character entry simpler, disc titles, track titles and/or performer names can be saved in title memos ([1] to [3]) and copied them with another disc or track. The title memos can save up to three sets of titles and/or input character sets.

Before using the editing function, press the PGM/CHARAC. key so that "TRACK" lights.

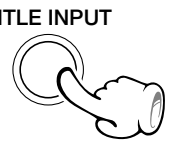
Select the "MD" input. → 23

Copying a disc or track title in a title memo (TITLE COPY)

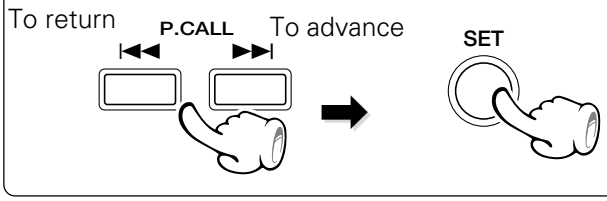
Example: To save track title "A. Songs" recorded and registered in track NO. 7 of an MD in memory No. [1]

1 *Select the save destination title memo number*

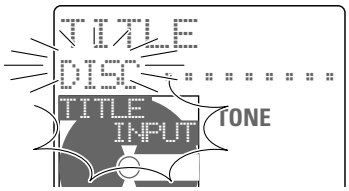
❶ Press the TITLE INPUT key.



❷ From the save destination memory numbers ([1] to [3]), select No. [1] and set the selection.



To abort operation, press the TITLE INPUT key again.



Each press of the ◄◄ or ►►| keys switches the operation.

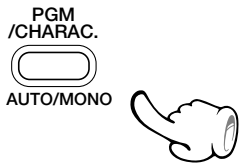
- **① DISC ••••••••••••••• (Disc title)**
- **② 001, 002 •••••••••••• (Track title)**
- **③ ALL ERASE ? ••••• (Complete erasure of disc and track titles)**
- **④ [1], [2], [3] ••••••••• (Title Memo)**

2 *Select the title group([123]) containing the copy source title.*

❶ Enter the skip mode.

If any of a, or 12 is displayed, press the ◄◄ or ►►| key.

❷ Select the title group([123]) containing the copy source title.

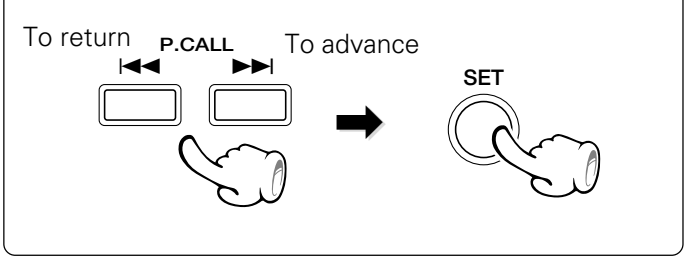


Press the PGM/CHARAC. key for the required number of times to select one of the character groups below. → 64

- **A~Z, space (1 blank character)**
- **a~z, space**
- **0~9, symbols**
- **Title Memo ([1 2 3]), Title Copy (disc title, track title)**

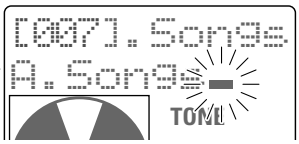
Continued on next page

3 Select the track title to be copied.



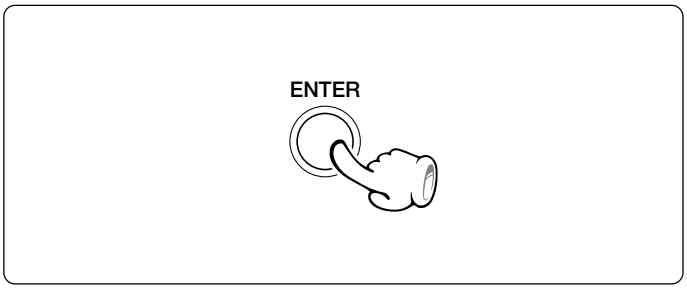
Select track No. 7 "**A. Songs**".

Set the selection.

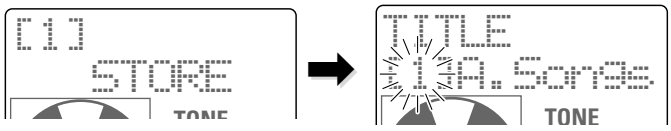


The title is scrolled.

4 Save it in the save destination title memo.

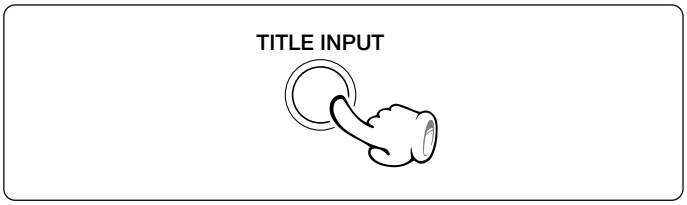


- It is also possible to copy additional titles to the same title memo by repeating steps 1-2 to 3.



- "**A. Songs**" is memorized in title memo No. [1] which was selected in step 1.

5 Press the TITLE INPUT key to complete editing.



Copying title memo contents as the title of another disc or track

This editing operation is available by exchanging the parties (copy destination and copy source) in the procedure of "Copying a Disc or Track Title in a Title Memo (TITLE COPY)". After performing steps 1 to 5 in the procedure on page 65, change steps 1-2 and 3 as shown below. The input can be repeated by simply performing these two steps.

Step 1-2 Select a disc or track title as the destination in place of the title memo.

Step 3 Select a title memo ([1] to [3]) as the copy source.

The title memo itself can also be edited.

Notes

- After performing step 3 in "**Copying a disc or track title in a title memo (TITLE COPY)**", additional titles can be saved in the same title memo by repeating steps 2-1 and 3 for each title.
- After performing step 3 in "**Copying a disc or track title in a title memo (TITLE COPY)**", the copied title can be edited by pressing the I◄◄ or ►►I key then performing the character input operation in step 2 in "**Assigning a title to a disc or track**".

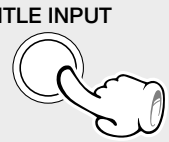
Select the "MD" input. →23

Entering characters in title memo (TITLE MEMO)

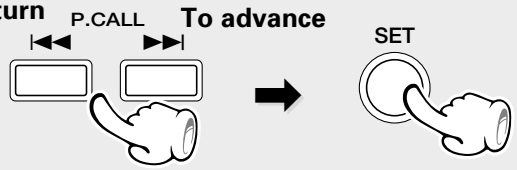
Example: To save characters "TREASURE" in title memo No. [2]

Select the save destination title memo number

❶ Press the TITLE INPUT key.

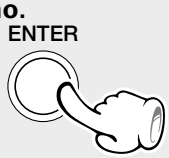


❷ From the save destination memory numbers ([1] to [3]), select No. [2] and set the selection.



❸ Input characters "TREASURE" by performing steps ❷-❶ to ❷-❸ in "Assigning a title to a disc or track". →61 →62

❹ Press the ENTER key to copy the characters in the title memo.



To abort operation, press the TITLE INPUT key again.

Each press of the |◄◄ or ►►| keys switches the operation.

- ① **DISC ••••••••••••••• (Disc title)**
- ② **001, 002 •••••••••••• (Track title)**
- ③ **ALL ERASE ?••••• (Complete erasure of disc and track titles)**
- ④ **[1], [2], [3] ••••••••• (Title Memo)**

- "**TREASURE**" is memorized in title memo No. [2] which was selected in step ❷.
- If required, character input to other title memo can be continued by repeating steps ❶ to ❹.

To delete the edited contents (EDIT CANCEL)

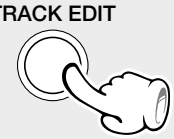
When the following key operation is performed before the minidisc is removed, return is possible to the same condition as when the disc was inserted. After cancellation, again perform the individual editing operations.

Before using the editing function, press the PGM/ CHARAC. key so that "TRACK" lights.

Select the "MD" input. → 23

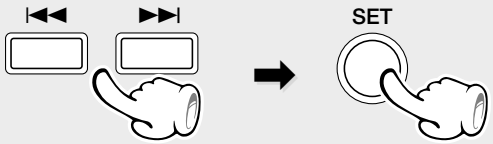
Press during stop

❶ Press the TRACK EDIT key



❷ Select "CANCEL ?"

To return **To advance**



❸ Set it.

Each press of the |◄◄ or ►►| keys switches the operation.

- **① Q.MOVE ?**
- **② Q.ERASE ?**
- **③ CANCEL ?**

- **If "CANCEL ⃠" is displayed, it indicates that the past editing cannot be canceled.**
  Cancellation is inhibited if the MD has already been ejected after editing or when editing is started because "UTOC ERROR" was displayed.

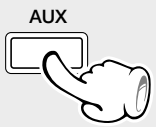
Listening to an AUX input source

A CD player with an analog or optical digital output, MD recorder, cassette deck or a similar component can be connected to the system as the auxiliary input source.

Connect the component as described in "Connection of Other Accessories" → 9.

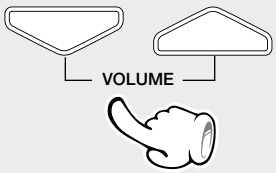
Listening to an Analog equipment

❶ Press the AUX key.



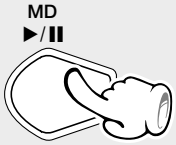
❷ Play the connected equipment.

❸ Ajust the volume.



Listening to a Digital equipment

❶ Press the MD ►/II key.

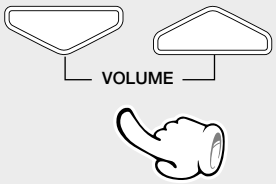


- If a MD has already been loaded, it starts to play now. Press the ■ **STOP** key to stop it.

❷ Set the MONITOR mode to "ON". → 34

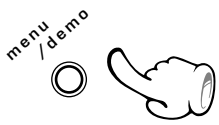
❸ Play the connected equipment.

❹ Ajust the volume.

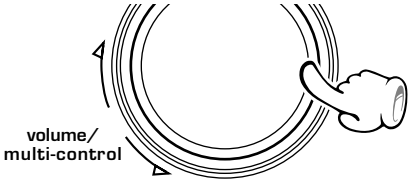


Adjusting the input level of the auxiliary source

❶ Press the menu/demo key.



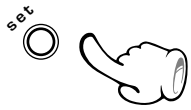
❷ Rotate the volume/multi-control knob to select "AUX D. LEVEL ?" or "AUX A. LEVEL ?", then press the set key.



❸ Adjust to the desired input level using the volume/multi-control knob.

- **AUX D LEVEL ····· -∞~+12 dB**
- **AUX A LEVEL ····· -4~+3**

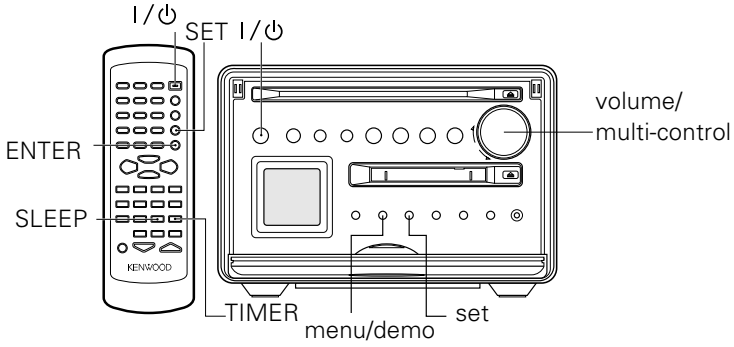
❹ Press the set key



Note When the input level is adjusted, the level of recording of the signals from the auxiliary input source connected to the **AUX (TAPE/MD)** input jacks and optical digital input jack also changes.

Timer operation

The timer makes it possible to play a CD or MD, receive radio or record CD or radio automatically in the specified time zone. The O.T.T. timer works only once when it is activated, the SLEEP timer switches power off (Standby mode) automatically even after you fall asleep, and the PROG. timer provides two timer programs which work every day once they are activated.



Be sure to adjust the clock before setting the timer. →15

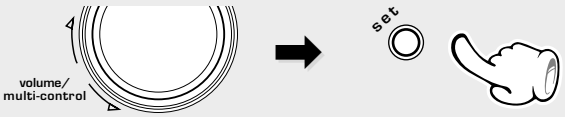
Setting the O.T.T. timer

Timer playback which occurs only once and only for an hour can be programmed by simply setting the start time. The timer playback reproduces the source selected at the last time the unit is turned off at the last set volume.

❶ Select the desired source and adjust its volume.

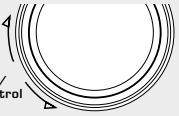
❷ Press the menu/demo key.

❸ Rotate the volume/multi-control knob to select "TIMER SET ?", then press the set key.



❹ Rotate the volume/multi-control knob to select "O.T.T. ?", then press the set key.

❺ Set the timer ON time by rotating the volume/ multi-control knob.

To put back the time  **To advance the time**

❻ Press the set key.

❼ Select "ON" or "OFF" by rotating the volume/ multi-control knob, then press the set key.

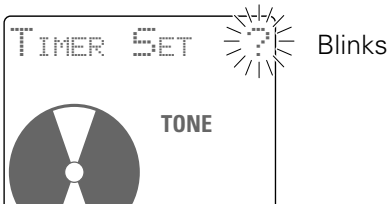
❽ Press the I/⏻ key to switch the power OFF (standby).
(The I/⏻/timer indicator lights in amber.)

After setting the timer, make sure that the power is set to OFF (Standby).

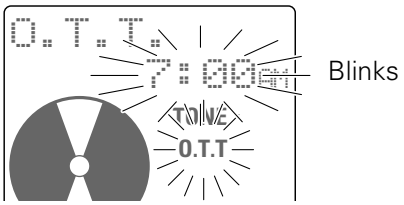
The program timer does not operate during playback by the O.T.T. timer.

- Even if the O.T.T. timer is set for the digital AUX input (external source), the MD will be played if an MD is left inside the main unit.

❸ Timer setting selection



❺ ON time setting

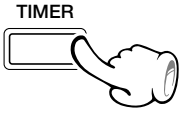


- The ON time can be set in steps of 5 minutes.

Remote control unit operation

Each press switch the modes as follows.

→ **O.T.T.**
PROG.1
PROG.2
PROG.1,2
Goes off (OFF)



- The remote control unit can be used only to set the timer activation ON or OFF. The time setting should be performed on the main unit.

To cancel O.T.T.

- **Switch the power ON and press the TIMER key repeatedly until "O.T.T." disappears.**
- **When the TIMER key is pressed repeatedly until "O.T.T." disappears after the start of O.T.T. timer playback, this will be changed to normal playback.**

Program timer playback (AI timer playback) and timer recording

Two timer programs (PROG.1, PROG.2) are available. Both of them are 24-hour timer programs which can be executed every day.
Each of timer reservation programs PROG.1 and PROG.2 can store the time zone and contents of timer operation, which can be executed or deactivated as required.

- It is possible to execute both timer reservation programs **PROG.1** and **PROG.2** simultaneously.
- The time zones of **PROG.1** and **PROG.2** should be set by reserving an interval of 1 minute or more so that they are not overlapped.

Be sure to adjust the clock before setting the timer. →15

1 *Select the source to be played (recorded) and adjust its playback volume.*

- To listen to radio

The station should be preset prior. →26 →27 →28

- To listen to CD

Insert a CD
(Program playback is not possible.) →20

- To listen to MD

Insert a MD
(Program playback is not possible.) →23

- For recording

Make preparations for recording. →32 →33 **Steps 1 to 3**

- Recording or playing the AUX source component

For timer playback or timer recording of a source component connected to the AUX jacks, connect it properly by referring to "Connection of Other Accessories ". →9

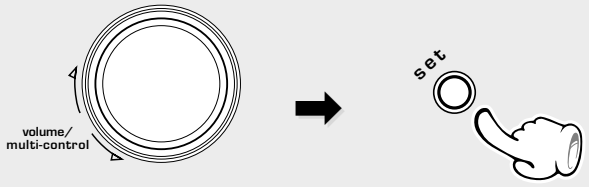
- In case an associated system component is connected, also read the instruction manual of the component.

2 *Select the timer reservation mode.*

❶ Press the menu/demo key.

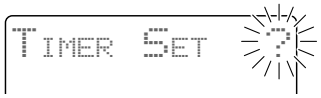
❷ Rotate the volume/multi-control knob to select "TIMER SET ?" , then press the set key.

❸ Rotate the volume/multi-control knob to select "PROG.1 ?", then press the set key.



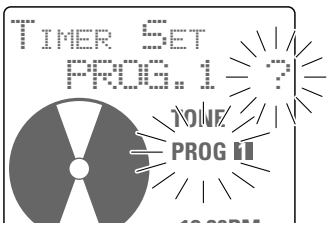
Example for playing radio broadcast from 10:30am to 11:30am using PROG.1

❷ Timer setting selection



Blinks

❸ PROG.1 selection



Blinks

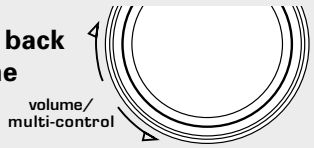
- If you make a mistake in the middle, press the **menu/demo** key to cancel the operation and restart it from step **2**.
- When a timer reservation already has been made, the contents will change to the new settings.

Be sure to adjust the clock before setting the timer.

3 *Enter the ON time.*

❶ **Set the timer ON time by rotating the volume/ multi-control knob.**

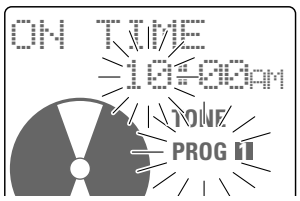
To put back the time / **To advance the time**



❷ **Press the set key.**

❸ **After entering the "hour" with the procedure in ❶ and ❷, enter the "minute" using the same procedure.**

❶ **ON time setting**



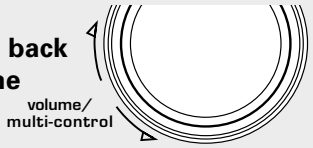
Blinks

- If you make a mistake in the middle, press the **menu/demo** key to cancel the operation and restart it from step 2.

4 *Enter the OFF time.*

❶ **Set the timer OFF time by rotating the volume/ multi-control knob.**

To put back the time / **To advance the time**



❷ **Press the set key.**

❸ **After entering the "hour" with the procedure in ❶ and ❷, enter the "minute" using the same procedure.**

❶ **OFF time setting**

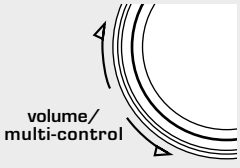
Blinks

- If you make a mistake in the middle, press the **menu/demo** key to cancel the operation and restart it from step 2.

5 *Make the desired reservation.*

For timer playback or AI timer playback

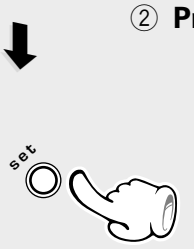
❶ **Rotate the volume/multi-control knob to select the timer mode.**

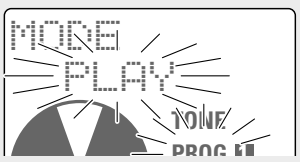


① **Select "PLAY" or "AI PLAY".**

- PLAY ..... Timer play
- AI PLAY ... Timer play with gradually increasing volume
- REC

② **Press the set key.**

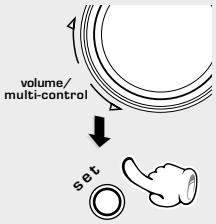




Continued on next page

For timer recording

❶ **Rotate the volume/multi-control knob to select the record mode.**

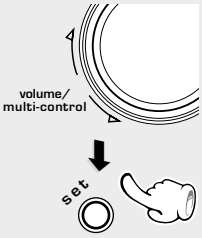


Select "REC".

- PLAY
- AI PLAY
- REC

Press the set key.

❷ **Select the input source.**



Select the source to be recording.

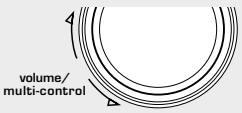
- TUNER
- AUX (Analog)
- DIGITAL AUX

Press the set key.

When you selected "DIGITAL AUX", go to step 6 now.

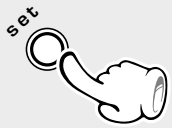
Continued on next page

❷ Select the input source.

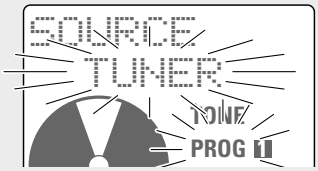


① **Select the source to be played.**

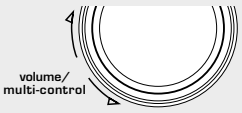
- **TUNER**
- **CD**
- **MD**
- **AUX (Analog)**
- **DIGITAL AUX (Digital)**



② **Press the set key.**



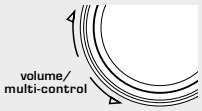
❸ Select the broadcast station (only when TUNER is selected).



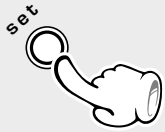
① **Select the preset station No.**

② **Press the set key.**

❸ Select the broadcast station (only when TUNER is selected).

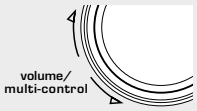


Select the preset station No.



Press the set key.

❹ Select the recording unit. (only when TUNER or AUX is selected)

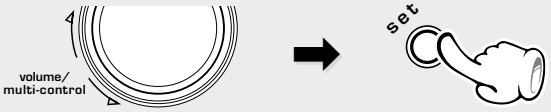


- **ANALOG**
- **MONO**

Press the set key.

6 *Set the program.*

❶ Select "ON" or "OFF" by rotating the volume/ multi-control knob, then press the set key.



- The set program contents are displayed when the program is set to **"ON"**.

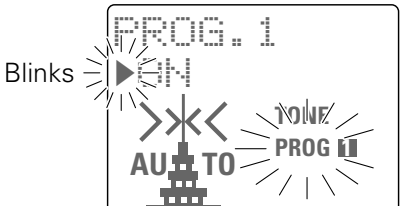
❷ Press the I / ⏻ /timer key to switch the power OFF (standby).
(The I / ⏻ /timer indicator lights in amber.)

Now the program timer reservation is complete.
Use the same procedure as above when you want to reserve a program timer operation in PROG.2.

Ensure that the power is OFF.

❶ When ON is set

Blinks

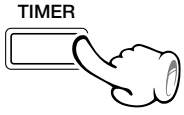


- The timer operation will not occur if the program is not set to ON.

Remote control unit operation

Each press switch the modes as follows.

- **O.T.T.**
- **PROG.1**
- **PROG.2**
- **PROG.1, 2**
- **Goes off (OFF)**



- The remote control unit can be used only to set the timer activation ON or OFF. The time setting should be performed on the main unit.

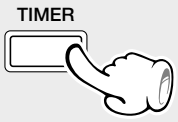
Notes

- With timer recording of radio broadcasting, the audio is muted automatically at the moment the power is switched ON by the timer. →19
- The reservation contents cannot be cleared. The contents are cleared only when they are changed.
- If the **I / ⏻ /timer** indicator blinks in amber when the power is switched OFF (Standby), the timer will not be executed. In this case, set the clock again. →15
- After the timer has been set and power is off (timer standby), if there is a power failure or the power cord is unplugged from and plugged again into the power outlet, the standby/timer indicator blinks in amber. In this case, set the clock again.

Be sure to adjust the clock before setting the timer.

To cancel execution of a timer program (Remote control unit only)

Press the TIMER key repeatedly until "PROG.1" or "PROG.2" disappears.

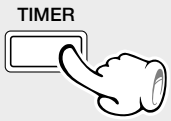


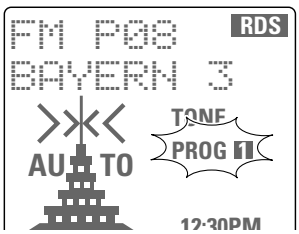
Goes off

- The reservation contents are held in memory.

To set the same timer program again (Remote control unit only)

Press the TIMER key repeatedly until "PROG.1" or "PROG.2" appears.





Lights

- Also prepare the disc and adjust the listening volume.

Sleep timer (SLEEP) (Remote control unit only)

The sleep timer is used to set the period after which the power will switch OFF automatically.

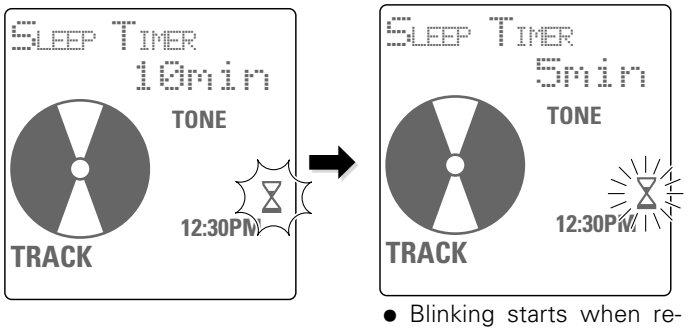
Press the SLEEP key during CD or MD playback or during radio reception.

- The unit is turned OFF automatically after the set time has elapsed.
- Pressing the **SLEEP** key once allows you to check the remaining time. When checking the remaining time, it can be fine adjusted (in 1-minute steps) using the **VOLUME** keys on the remote control unit.

The system has been set so that the LCD brightness drops automatically during the sleep timer operation. (Auto dimmer)

- Each press increases the set time by 10 minutes. The sleep timer can be set up to about 90 minutes.

10 →20→30 ....70 → 80→ 90 → Cancel



- Blinking starts when remaining time is 5 minutes or less.

To cancel

Turn the power OFF or press the SLEEP key until the sleep time is cancelled.

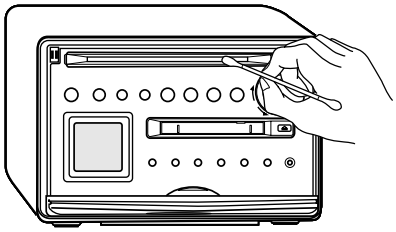
Note

After the timer has been set and power is off (timer standby), if there is a power failure or the power cord is unplugged from and plugged again into the power outlet, the **I / ⏻ /timer** indicator blinks in amber. In this case, set the clock again.

Maintenance

Cleaning the CD insertion slot

Insertion slot and its surroundings
The CD insertion slot should be cleaned because it tends to collect dust.
If a CD is inserted while dust is accumulated around the insertion slot, the disc may be damaged.



Maintenance of the unit

When the front panel or case becomes dirty, wipe with a soft, dry cloth. Do not use thinner, benzine, alcohol, etc. for these agents may cause discoloration.

In regard to contact cleaner

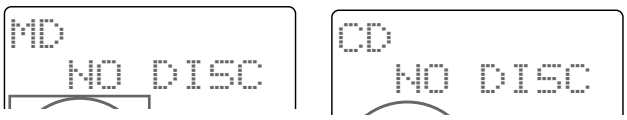
Do not use contact cleaners because it could cause a malfunction. Be specially careful not to use contact cleaners containing oil, for they may deform the plastic component.

Note related to transportation and movement

Before transporting or moving this unit, carry out the following operations.

❶ Switch the power ON.

❷ Select the CD or MD input, wait for a few seconds and ensure that the LCD becomes as shown in the figure below. If a disc is left in the main unit, press the ▲ key to eject it.



❸ Turn the power OFF.

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Caution on MD-Clip data

Do not attempt to record or edit a disc in which MD-Clip data (still images, etc.) have been recorded. Otherwise, the Clip data may be lost.

Memory backup function

Stored contents which are cleared immediately when power plug is unplugged from power outlet	Clock display SOUND
Stored contents which are cleared in at least a day after power plug is unplugged from power outlet	"on/standby" status (ON or STANDBY) A.P.S. Last input selection Volume control value Tone control levels AUX input level Balance setting Rec levels Rec input Contrast setting Backlight setting Receiving band Frequency Preset stations Auto/mono setting Program timer setting contents

Memory Backup for the MD Recorder Section

When the power is set to OFF (Standby) or the power cord is unplugged from the wall outlet, the memory will be backed up for about 3 days.

The contents of the memory are not stored on the disc if the power cord is unplugged.

If there is a power failure or if the power cord is unplugged, the recording or editing information (normally recorded when the minidisc is removed) may be erased or destroyed before it is recorded on the minidisc. Once the information has disappeared, it can not be recovered. After recording or editing, always remove the minidisc to record the recording or editing information.

Reference

Caution on condensation

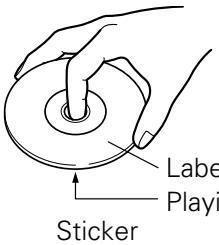
Condensation (of dew) may occur inside the unit when there is a great difference in temperature between this unit and the outside.
This unit may not function properly if condensation occurs. In this case, leave the unit for a few hours with the power left ON, and restart the operation after the condensation has dride up.

Be specially cautious against condensatin in a following circumsatance:
When this unit is carried from a place to another across a large difference in temperature, when the humidity in the room where this unit is installed increases, etc.

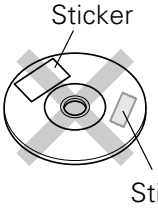
When your unit needs to be repaired, bring the entire set (Speakers excluded) to your dealer.

Handling of discs

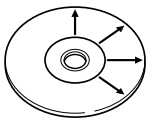
Disc handling precautions



Handling
Hold the discs so that you do not touch the playing surface.



Do not attach paper or tape to either the playing side or the label side of the discs.



Cleaning
If fingerprints or foreign matter become attached to the disc, lightly wipe the disc with a soft cotton cloth (or similar) from the center of the disc outwards in a radial manner.

Storage
When a disc is not to be played for a long period of time, remove it from the player and store it in its case.

Discs which can be played with this unit

CD (12 cm, 8 cm), and the audio part of CDV, CD-G, CD-EG and CD-EXTRA.
Use discs that comply with the IEC standard, for example a disc carrying the COMPACT disc DIGITAL AUDIO marking on the label surface.

Never play a cracked or warped disc

During playback, the disc rotates at high speed in the player.
Therefore, to avoid danger, never use a cracked or deformed disc or a disc repaired with tape or adhesive agent. Please do not use discs which are not round because they may cause a malfunction.

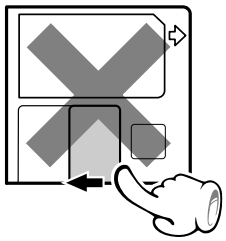
Disc accessories

The disc accessories (stabilizer, protection sheet, protection ring, etc.) which are marketed for improving the sound quality or protecting discs as well as the disc cleaner should not be used with this system because they may cause malfunction.

Handling of Mini Disc

As the Mini Disc is accommodated inside a cartridge, it can be handled without caring about dust or fingerprint. However, stained or soiled cartridge may cause malfunction. To enjoy beautiful sound for extended period of time, take care on the following points.

Do not touch the disc directly.
Do not touch the disc by opening the shutter with your hand. The cartridge will be damaged if it is forced open.



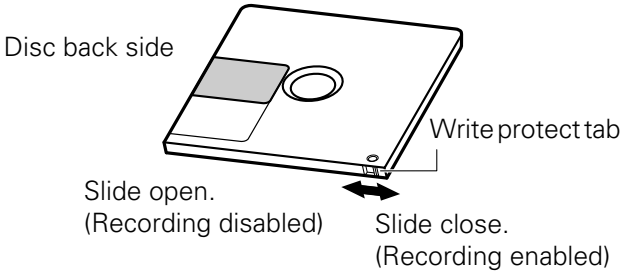
Storage position
Do not leave Mini Discs in place where the temperature and/or humidity are extremely high (for example, in a place subject to direct sunlight).

Dust countermeasure
The shutter of the disc cartridge is permanently open while the disc is loaded in the set. Therefore, to prevent dust from penetrating inside the disc, take the disc out of the unit immediately after completion of recording or playback.

In regard to contact cleaner
Do not use contact cleaners because it could cause a malfunction. Be specially careful not to use contact cleaners containing oil, for they may deform the plastic component.

Care
Wipe periodically dust and dirt attached on the cartridge with a dry cloth.

Write protect tab
To protect recorded contents against accidental erasure, set the write protect tab of the disc open. Return the tab to the original position when you want to record signals on the disc.



Note on disc accessories
Do not use the lens cleaner for this may lead to malfunction of the unit.

Note on the cartridge labels
Apply each label firmly to every corner so that it will not be peeled off.

In case of difficulty

What seems to be a malfunction is not always so. Before calling for service, check the following table according to the symptom of your trouble.

Operation to reset

The microcomputer may fall into malfunction (impossibility to operate, erroneous display, etc.) when the power cord is unplugged while unit is ON or due to an external factor. In this case, execute the following procedure to reset the microcomputer and return it to normal condition.

- Please note that resetting the microcomputer clears the contents stored in and it returns to condition when it left the factory.

Unplug the power cord from the power outlet then, while holding the menu/demo key depressed, plug the power cord again.

Amplifier section/Speakers

Symptom	Remedy
Sound is not produced.	● Connect properly referring to **"System connection"**. → 7 → 8 ● Adjust to an required volume. → 18 ● Switch **MUTE** OFF. → 19 ● Unplug the headphone plug. → 19
I / ⏻ /timer indicator blinks in red and no sound is put out.	● A speaker cord is short-circuited. Turn power off and re-connect the speaker cord. → 8
The I / ⏻ /timer indicator blinks in amber.	● Adjust the present time again. → 15
No sound from the headphones.	● Insert correctly. → 19 ● Adjust to an required volume. → 18
Sound is not produced from the left or right speakers.	● Connect properly referring to **"System connection".** → 8 ● Adjust the optimum left and right balance. → 19
The clock display blinks without changing the figures.	● Adjust the present time again. → 15
Timer operation is not possible.	● Adjust the present time referring to **"Clock adjustment"**. → 15 ● Set the timer ON time and OFF time. → 73 ● Press the **TIMER** key to set up the execution. → 74

Tuner section

Symptom	Remedy
Radio stations cannot be received.	● Connect antennas. → 7 ● Select a band. → 26 ● Tune to the frequency of the desired station. → 28
Noise interferes.	● Install the outdoor antenna in an apart position from the road. ● Switch the suspected electric appliance OFF. ● Install the TV or the system at an increased distance between them.
A station has been preset but it cannot be received by pressing the ◄◄,►► key.	● Preset stations with tunable frequencies. → 27 → 28 ● Preset stations again. → 27 → 28

Remote control unit

Symptom	Remedy
Remote control operation is not possible.	● Replace with new batteries. → 13 ● Operate the unit inside the remote controllable range. → 13

CD player section

Symptom	Remedy
A CD is placed in the player but it cannot be played.	● Place the disc properly, with the label side facing upward. ● Clean the disc referring to **"Disc handling precautions"**. →78 ● Refer to **"Caution on condensation"** and remove the condensation by evaporation. →77
Sound is not produced.	● Press the CD ►/II key. ● Clean the disc referring to **"Disc handling precautions"**. →78
Sound skips.	● Clean the disc referring to **"Disc handling precautions"**. →78 ● Install the unit in a place not subject to vibrations.

Symptoms related to MD standard

Symptom	Cause
"DISC FULL" is displayed while the disc still has a remaining recordable time.	● More than 255 tracks (track No. 256 or more) cannot be recorded. (There may be also cases in which recording is impossible while the track number is less than 256.) In such a case, the REMAIN time display shows **"0:00"**.
The possible recording time does not increase even when a short track is erased.	● When the remaining time of the entire disc is less than 12 sec, the remaining time indication on the display becomes **"0:00"**. When the total time of the deleted tracks exceeds 12 sec, the display changes to the recordable time. ● When a short track is deleted on a repeatedly edited disc, the remaining time may not increase.
Tracks can not be connected.	● Connection of the track resulting from edit processing may not be possible.
The time which has been recorded on the MD and the remaining time do not add up to the maximum recording time (60, 74 and 80 min.).	● As recording is executed with 2 sec. as the minimum unit, the display time may not coincide.
When search is performed in a track which has been compiled by editing, the sound is sometimes interrupted.	● This derives from the restriction in the MD system standard and not a malfunction.
The track numbers are not assigned correctly.	● Depending on the contents of the recorded source (CD etc.), the track numbers may not be assigned correctly.
"READING" is displayed for an abnormally long time.	● When a new recordable MD (with nothing recorded) is inserted, **"READING"** is displayed longer than usual.
The time display becomes inaccurate with a monaurally recorded disc.	● Monaural recording and stereo recording are executed according to different formats. This is not a malfunction.
Input of 1792 title characters is not possible.	● The title recording area is used in units of 7 characters, so that input of 1792 characters may not be possible.

MD recorder section (other symptoms)

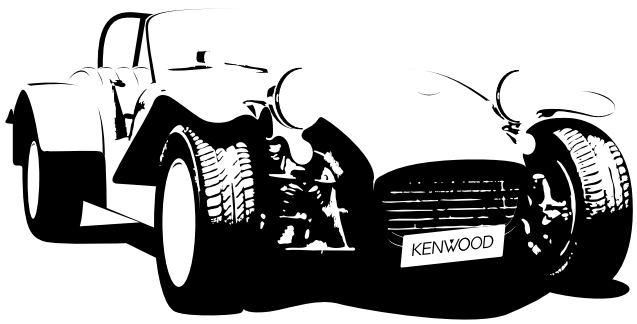
Symptom	Remedy
Sound is not output even when the play key is pressed.	● Load a prerecorded disc or playback-only disc.
Recording is not possible	● Change the position of the write protect tab to the write position or use a recordable disc. →78 ● Adjust the AUX input level. →35 ● Set the input selector to the source to be recorded. →32
Sound is distorted.	● Adjust the AUX input level. →35
Noise is noticeable.	● Install the unit at a position apart from an electric appliance or TV set.

MD recorder section (Displayed messages and actions to be taken against them)

Displayed Message	Meaning	Action
NO DISC	●No disc is placed on the tray.	●Load a disc.
CAN'T COPY	●An attempt is made to record digital signal from a source while its digital copy has been prohibited by SCMS. ●An attempt is made to record a CD containing recording of non-audio digital signal.	●Switch to analog recording. ●This unit cannot record this kind of signal.
DISC FULL	●There is no recordable area on the disc. ●An attempt is made to record a 256th track.	●Use another recordable disc. ●More than 256 tracks cannot be recorded per disc.(There may be also cases in which recording is impossible while the track number is less than 256.)
FULL	●An attempt is made to assign a title with more characters than usable.	●Refer to "Total number of title characters".
BLANK DISC	●The disc does not contain any recordings.	●When playback is required, use a recorded disc.
NO TRACKS	●The disc does not contain any tracks but has a disc title.	●The disc can be used for recording without any problem.
READING	●The TOC *1 data of the disc is being read.	●This is a normal operation.
WRITING	●The data related to editing or recording is being written in the disc.	●This is a normal operation.
UTOC ERROR	●The contents of UTOC *2 are abnormal.	●Perform **"ALL ERASE"** operation. If this is not possible, use another disc.
CAN'T EDIT	●An attempt is made to perform editing beyond the restrictions, for example to erase a track which is too short.	●Perform editing following the restrictions.
ok?(blinking)	●This is a message for confirming if editing can really be executed.	●Press the **ENTER** key to execute editing.
PROTECTED	●The minidisc is write-protected.	●Cancel the write protection.
PLAY ONLY	●The minidisc is only for playback.	●Insert a minidisc for recording.
Please wait XX min	●An attempt is made to play a CD in less than 74 minutes after high-speed recording of the same CD was started before.	●Start high-speed recording after the displayed time has elapsed or record the CD with normal-speed recording.
Sorry Buffer Error	●An attempt is made to record a 31st CD in high-speed recording in the recent 74 minutes.	●Start high-speed recording after the displayed time has elapsed or record the CD with normal-speed recording.

*1 All minidiscs contain a Table of Contents (TOC) in addition to sound signals. The TOC is similar to the table of contents in a book and contains information, such as track numbers, track length, and character information, that cannot be rewritten.

*2 In addition to the TOC, minidiscs also contain a special User's Table of Contents (UTOC) that contains track number, track length, and character information, that can be rewritten.


KENWOOD

Specifications

Main unit

[Amplifier section]

Rated output power during STEREO operation
1 kHz, 1.0 % T.H.D., at 6 Ω ..... 15 W + 15 W
Effective output power during STEREO operation
1 kHz, 10 % T.H.D., at 6 Ω ..... 20 W + 20 W
Frequency response
AUX ..... 50 Hz~50 kHz (0 dB ~ -3dB)

[Tuner section]

FM tuner section
Tuning frequency range ..... 87.5 MHz ~ 108 MHz
MW (AM) tuner section
Tuning frequency range ..... 531 kHz ~ 1,602 kHz

[MD recorder section]

Laser wave length ..... 765 to 805 nm
Laser power class ..... Class 3A
Laser ..... Semiconductor laser
Recording method ..... Field modulation overwrite method
Audio compression
..... ATRAC (Adaptive TRansform Acoustic Coding)
D/A Conversion ..... 1 Bit
Wow & flutter ..... Less than unmeasurable limit

[CD player section]

Laser wave length ..... 760 to 800 nm
Laser power class ..... Class 3A
Laser ..... Semiconductor laser
D/A Conversion ..... 1 Bit
Oversampling ..... 8 fs (352.8 kHz)
Frequency response ..... 20 Hz~20 kHz, ± 1 dB
Wow and flutter ..... Less than unmeasurable limit

[General]

Power consumption ..... 60 W
Dimensions
(Horizontal installation) ..... W : 220 mm (8-11/16")
H : 150 mm (5-7/8")
D : 356 mm (14")
(Vertical installation) ..... W : 142 mm (5-9/16")
H : 228 mm (9")
D : 356 mm (14")
Weight (net) ..... 6 kg (13.2 lb)

Speakers

Enclosure ..... BASS RE-FREX type
Speaker configuration
Woofer ..... 100 mm, cone type
Tweeter ..... 19 mm, dome type
Impedance ..... 6 Ω
Maximum input level ..... 30 W
Dimensions
(Horizontal installation) ..... W : 220 mm (8-11/16")
H : 150 mm (5-7/8")
D : 252 mm (9-15/16")
(Vertical installation) ..... W : 142 mm (5-9/16")
H : 228 mm (9")
D : 252 mm (9-15/16")
Weight (net) ..... 2.3 kg (5.1 lb) (1 piece)

Notes

KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

- Sufficient performance may not be exhibited at extremely cold locations (where water freezes).

KENWOOD

For your records

Record the serial number, found on the back of the unit, in the spaces designated on the warranty card, and in the space provided below. Refer to the model and serial numbers whenever you call upon your dealer for information or service on this product.

Model _____ Serial Number _____